SCORE Search Results Details for Application 09757788 and Search Result 20070122_145823_us-09-757-788a-1.rag.

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This page gives you Search Results detail for the Application 09757788 and Search Result 20070122_145823_us-09-757-788a-1.rag.

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OM protein - protein search, using sw model

Run on:

January 23, 2007, 03:12:39; Search time 199 Seconds

(without alignments)

89.605 Million cell updates/sec

Title:

US-09-757-788A-1

Perfect score: 41

Sequence:

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

2589679 seqs, 457216429 residues

Total number of hits satisfying chosen parameters:

2589679 -

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database :

A Geneseq 8:*

1: geneseqp1980s:*
2: geneseqp1990s:*

3: geneseqp2000s:*

4: geneseqp2001s:*

5: geneseqp2002s:*

6: geneseqp2003as:*

7: geneseqp2003bs:*

8: genesegp2004s:* 9: geneseqp2005s:*

10: geneseqp2006s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| | | ક | | | | | | |
|--------|-------|-------|--------|-----|-----------|---|-----------|-----------|
| Result | | Query | | | | | | |
| No. | Score | Match | Length | DB | ID | | Descripti | ion |
| | | | | | | | | |
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| 7 | 35 | 85.4 | 28 | 3 | ADM40110 | | | Human glu |
| 8 | 35 | 85.4 | 29 | 3 | ADM40097 | | | Human glu |
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| 10 | 35 | 85.4 | 29 | 3 | ADM40100 | | | Human glu |
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| 12 | 35 | 85.4 | 29 | 3 | ADM40103 | | | Human glu |
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| 34 | 33 | 80.5 | 29 | 9 | AEB45993 | | Aeb45993 | Glucagon- |
| 35 | 33 | 80.5 | 30 | 2 | AAY80321 | | | Glucagon |
| 36 | 33 | 80.5 | 30 | 8 | ADR00568 | | Adr00568 | Human ins |
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| 41 | 33 | 80.5 | 31 | 2 | AAW03901 | | Aaw03901 | Glucagon |
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| 52 | 32 | 78.0 | 27 | 2 | AAR65215 | | Aar65215 | Glucagon- |
| 53 | 32 | 78:0 | 27 | 3 | AAY78953 | | Aay78953 | Glucagon- |
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| 60 | 32 | 78.0 | 28 | 2 | AAR98950 | Aar98950 | Target pe |
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| 64 | 32 | 78.0 | 28 | 3 | AAY88347 | Aay88347 | Glucagon- |
| 65 | 32 | 78.0 | 28 | 3 | AAB07295 | Aab07295 | Modified |
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| 76 | 32 | 78.0 | 28 | 9 | ADV25332 | | Human glu |
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| 78 | 32 | 78.0 | 28 | 9 | AEB45988 | • | Glucagon- |
| 79 | 32 | 78.0 | 28 | 9 | AEB45984 | | Glucagon- |
| 80 | 32 | 78.0 | 28 | 9 | AEB46018 | | Glucagon- |
| 81 | 32 | 78.0 | 28 | 9 | AEB45986 | | Glucagon- |
| 82 | 32 | 78.0 | 28 | 9 | AEB46004 | | Glucagon- |
| 83 | 32 | 78.0 | 28 | 9 | AEB46001 | | Glucagon- |
| 84 | 32 | 78.0 | 28 | 9 | AEB45987 | | Glucagon- |
| 85 | 32 | 78.0 | 28 | 10 | AEF04384 | | 4 Human tru |
| 86 | 32 | 78.0 | 28 | 10 | AEF04387. | | 7 Human tru |
| 87 | 32 | 78.0 | 28 | 10 | AEF04388 | Aef0438 | 8 Human tru |
| 88 | 32 | 78.0 | 28 | 10 | AEF04382 | Aef0438 | 2 Human tru |
| 89 | 32 | 78.0 | 29 | 2 | AAR24524 | | GLP-1 der |
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| 91 | 32 | 78.0 | 29 | 2 | AAR63248 | Aar63248 | Insulinot |
| 92 | 32 | 78.0 | 29 | 2 | AAR69075 | | Glycogen |
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| 94 | 32 | 78.0 | 29 | 2 | AAW63181 | | GLP-1(7-3 |
| 95 | 32 | 78.0 | 29 | 2 | AAW50904 | | Glucagon- |
| 96 | 32 | 78.0 | 29 | 2 | AAY18038 | | GLP-1(7-3 |
| 97 | 32 | 78.0 | 29 | 2 | AAY34197 | | GLP-1 mut |
| 98 | 32 | 78.0 | 29 | 2 | AAY39811 | _ | Glucagon- |
| 99 | 32 | 78.0 | 29 | 3 | AAY78951 | | Glucagon- |
| 100 | 32 | 78.0 | 29 | 3 | AAY53279 | | Glucagon- |
| | | | | - | | 112700275 | |

ALIGNMENTS

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RESULT 1
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XX
DT
     03-JUN-2004 (first entry)
XX
DE
     Human glucagon-like peptide (GLP)-1 analogue SeqID102.
XX
ΚW
     glucagon-like peptide-1; GLP-1; antidiabetic; anorectic; anti-arthritic;
ΚW
     antiproliferative; neuroprotective; antidiabetic; hepatotropic;
```

```
KW
     antiinflamatory; hypotensive; anabolic; osteopathic; nephrotropic;
     GLP-1 receptor agonist; glucagon secretion; glucose level; obesity;
KW
     glucagonoma; airway secretory disorder; metabolic disorder; arthritis;
KW
     osteoporosis; central nervous system disease; restenosis;
KW ·
     neurodegeneration; diabetes type I; diabetes type II;
ΚW
     renal heart failure; congestive heart failure; nephrotic syndrome;
     cirrhosis; pulmonary edema; hypertension; food intake; hypoglycaemia;
ΚW
ΚW
     malabsorption syndrome; gastectomy; small bowel resection; human; mutant;
ΚW
     mutein.
XX
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     Homo sapiens.
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     Synthetic.
XX
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     Key:
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     15-JUN-2000.
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     07-DEC-1999;
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PR
     07-DEC-1998;
                    98US-00206833.
PR
     07-DEC-1998;
                    98US-0111186P.
XX
PA
     (TULA ) TULANE EDUCATIONAL FUND.
PA
     (SCRC ) SOC CONSEILS RECH & APPL SCI.
XX
PΙ
     Dong ZX, Coy DH;
XX
DR
     WPI; 2000-423382/36.
XX
PT
     Novel analogs of human glucagon-like peptide-1, useful for treatment of
PT
     e.g. diabetes types I or II, have better metabolic stability than the
     native peptide.
PT
XX
PS
     Claim 7; SEQ ID NO 102; 41pp; English.
XX
CC
     This invention relates to novel analogues of glucagon-like peptide-1 (GLP
     -1) and their salts. The invention may be useful for the production of
CC
CC
     compounds with an antidiabetic, anorectic, anti-arthritic,
CC
     antiproliferative, neuroprotective, antidiabetic, hepatotropic,
CC
     antiinflamatory, hypotensive, anabolic, osteopathic or nephrotropic
```

```
activity acting as GLP-1 receptor agonists; they increase the release of
CC
CC
    insulin and reduce secretion of glucagon, normalising glucose levels. The
    invention may be useful for the treatment of obesity, glucagonomas,
CC
    secretory disorders of the airway, metabolic disorders, arthritis,
CC
    osteoporosis, central nervous system disease, restenosis, .
CC
    neurodegeneration and, especially, diabetes types I and II, also renal
CC
    and congestive heart failures, nephrotic syndrome, cirrhosis, pulmonary
CC
    edema, hypertension and diseases requiring a reduction in food intake.
CC
    Also some of the analogues have an antagonist effect at the GLP-1
CC
    receptor and can be used to treat hypoglycaemia and malabsorption
CC
    syndrome associated with gastectomy or small bowel resection. The
CC
    analogues of the invention are metabolically more stable than native GLP-
CC
    1 so have longer in vivo half-life. The present sequence is that of a
CC
    human GLP-1 peptide analogue of the invention.
XX
SO:
    Sequence 28 AA;
  Query Match
                                  Score 36; DB 3; Length 28;
                          87.8%;
  Best Local Similarity
                          34.8%;
                                 Pred. No. 0.19;
 Matches
            8; Conservative
                                 0; Mismatches
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             Db
           1 HAEGTFTSDVSSXAEAAAAKAFI 23
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AC
    ADM40104;
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DT
    03-JUN-2004 (first entry)
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DE
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KW
    glucagon-like peptide-1; GLP-1; antidiabetic; anorectic; anti-arthritic;
ΚW
    antiproliferative; neuroprotective; antidiabetic; hepatotropic;
KW
    antiinflamatory; hypotensive; anabolic; osteopathic; nephrotropic;
ΚW
    GLP-1 receptor agonist; glucagon secretion; glucose level; obesity;
KW
    glucagonoma; airway secretory disorder; metabolic disorder; arthritis;
KW
    osteoporosis; central nervous system disease; restenosis;
KW
    neurodegeneration; diabetes type I; diabetes type II;
KW
    renal heart failure; congestive heart failure; nephrotic syndrome;
KW
    cirrhosis; pulmonary edema; hypertension; food intake; hypoglycaemia;
KW
    malabsorption syndrome; gastectomy; small bowel resection; human; mutant;
KW
    mutein.
XX
OS
    Homo sapiens.
OS
    Synthetic.
XX
FH
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FT
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                     Pyridylalanine)"
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FT
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XX
PR
     07-DEC-1998;
                    98US-00206833.
     07-DEC-1998;
PR
                    98US-0111186P.
XX
PA
     (TULA ) TULANE EDUCATIONAL FUND.
PΑ
     (SCRC ) SOC CONSEILS RECH & APPL SCI.
XX
PΙ
     Dong ZX, Coy DH;
XX
DR
     WPI; 2000-423382/36.
XX
PΤ
     Novel analogs of human glucagon-like peptide-1, useful for treatment of
PT
     e.g. diabetes types I or II, have better metabolic stability than the
PT
     native peptide.
XX
PS
     Claim 7; SEQ ID NO 97; 41pp; English.
XX
CC
     This invention relates to novel analogues of glucagon-like peptide-1 (GLP
CC
     -1) and their salts. The invention may be useful for the production of
CC
     compounds with an antidiabetic, anorectic, anti-arthritic,
CC
     antiproliferative, neuroprotective, antidiabetic, hepatotropic,
CC
     antiinflamatory, hypotensive, anabolic, osteopathic or nephrotropic
CC
     activity acting as GLP-1 receptor agonists; they increase the release of
CC
     insulin and reduce secretion of glucagon, normalising glucose levels. The
CC
     invention may be useful for the treatment of obesity, glucagonomas,
CC
     secretory disorders of the airway, metabolic disorders, arthritis,
CC
     osteoporosis, central nervous system disease, restenosis,
CC
     neurodegeneration and, especially, diabetes types I and II, also renal
CC
     and congestive heart failures, nephrotic syndrome, cirrhosis, pulmonary
CC
     edema, hypertension and diseases requiring a reduction in food intake.
CC
     Also some of the analogues have an antagonist effect at the GLP-1
     receptor and can be used to treat hypoglycaemia and malabsorption
CC
CC
     syndrome associated with gastectomy or small bowel resection. The
CC
     analogues of the invention are metabolically more stable than native GLP-
     1 so have longer in vivo half-life. The present sequence is that of a
CC
     human GLP-1 peptide analogue of the invention.
XX
SQ
     Sequence 28 AA;
  Query Match
                          87.8%;
                                  Score 36; DB 3; Length 28;
                          34.8%; Pred. No. 0.19;
  Best Local Similarity
  Matches
            8; Conservative
                                 0; Mismatches 15; Indels
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            1 HXXGXFTXDXXXXXXXXXXXXI 23
Qу
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                        11
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Db

XX

RESULT 3 ADM40102 ADM40102 standard; peptide; 29 AA. XXAC ADM40102; XX 03-JUN-2004 (first entry) DTXX DE Human glucagon-like peptide (GLP)-1 analogue SeqID95. XX KW glucagon-like peptide-1; GLP-1; antidiabetic; anorectic; anti-arthritic; KW antiproliferative; neuroprotective; antidiabetic; hepatotropic; KW antiinflamatory; hypotensive; anabolic; osteopathic; nephrotropic; KW GLP-1 receptor agonist; glucagon secretion; glucose level; obesity; KW glucagonoma; airway secretory disorder; metabolic disorder; arthritis; KW osteoporosis; central nervous system disease; restenosis; neurodegeneration; diabetes type I; diabetes type II; ΚW KW renal heart failure; congestive heart failure; nephrotic syndrome; KW cirrhosis; pulmonary edema; hypertension; food intake; hypoglycaemia; KW malabsorption syndrome; gastectomy; small bowel resection; human; mutant; KW mutein. XX OS Homo sapiens. OS Synthetic. XX FΗ Kev Location/Qualifiers FT Modified-site FT/note= "Wild-type Tyr replaced by 3-Pal (3-FTPyridylalanine)" FTMisc-difference 16 FT/note= "Wild-type Gly replaced by Ala" FTMisc-difference 17 FT/note= "Wild-type Gln replaced by Ala" FTMisc-difference 20 FT/note= "Wild-type Lys replaced by Ala" FTMisc-difference 21 FT/note= "Wild-type Glu replaced by Ala" FTModified-site 25 FT/note= "Wild-type Trp replaced by 3-Pal (3-FTPyridylalanine)" FTModified-site 28 FT/note= "Wild-type Val replaced by Gaba (gabaamino-butyric FTFTModified-site 29 FT/note= "C-terminal amide" XX PΝ WO200034332-A1. XXPD 15-JUN-2000. XXPF 07-DEC-1999; 99WO-US028929. XX PR 07-DEC-1998; 98US-00206833. 07-DEC-1998; PR 98US-0111186P. XXPA (TULA) TULANE EDUCATIONAL FUND. (SCRC) SOC CONSEILS RECH & APPL SCI. PA

```
PΙ
     Dong ZX,
               Coy DH;
XX
DR
    WPI; 2000-423382/36.
XX
PΤ
    Novel analogs of human glucagon-like peptide-1, useful for treatment of
PT
    e.g. diabetes types I or II, have better metabolic stability than the
PT
    native peptide.
XX
PS
    Claim 7; SEQ ID NO 95; 41pp; English.
XX
CC
     This invention relates to novel analogues of glucagon-like peptide-1 (GLP
CC
    -1) and their salts. The invention may be useful for the production of
CC
     compounds with an antidiabetic, anorectic, anti-arthritic,
CC
    antiproliferative, neuroprotective, antidiabetic, hepatotropic,
CC
     antiinflamatory, hypotensive, anabolic, osteopathic or nephrotropic
CC
     activity acting as GLP-1 receptor agonists; they increase the release of
CC
    insulin and reduce secretion of glucagon, normalising glucose levels. The
CC
    invention may be useful for the treatment of obesity, glucagonomas,
CC
    secretory disorders of the airway, metabolic disorders, arthritis,
CC
    osteoporosis, central nervous system disease, restenosis,
CC
    neurodegeneration and, especially, diabetes types I and II, also renal
CC
    and congestive heart failures, nephrotic syndrome, cirrhosis, pulmonary
CC
    edema, hypertension and diseases requiring a reduction in food intake.
CC
    Also some of the analogues have an antagonist effect at the GLP-1
CC
    receptor and can be used to treat hypoglycaemia and malabsorption
CC
     syndrome associated with gastectomy or small bowel resection. The
CC
     analogues of the invention are metabolically more stable than native GLP-
CC
     1 so have longer in vivo half-life. The present sequence is that of a
CC
     human GLP-1 peptide analogue of the invention.
XX
SQ
     Sequence 29 AA;
                          87.8%; Score 36; DB 3; Length 29;
  Query Match
  Best Local Similarity
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                                  Pred. No. 0.2;
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                                                  15; Indels
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              Db
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ΙD
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XX
DT
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XX
DΕ
     Human glucagon-like peptide (GLP)-1 analogue SeqID94.
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KW
     glucagon-like peptide-1; GLP-1; antidiabetic; anorectic; anti-arthritic;
KW
     antiproliferative; neuroprotective; antidiabetic; hepatotropic;
KW
     antiinflamatory; hypotensive; anabolic; osteopathic; nephrotropic;
KW
     GLP-1 receptor agonist; glucagon secretion; glucose level; obesity;
KW
     glucagonoma; airway secretory disorder; metabolic disorder; arthritis;
KW
     osteoporosis; central nervous system disease; restenosis;
KW
     neurodegeneration; diabetes type I; diabetes type II;
KW
     renal heart failure; congestive heart failure; nephrotic syndrome;
KW
     cirrhosis; pulmonary edema; hypertension; food intake; hypoglycaemia;
     malabsorption syndrome; gastectomy; small bowel resection; human; mutant;
```

```
mutein.
KW
XX
OS
     Homo sapiens.
os
     Synthetic.
XX
FH
     Key
                     Location/Qualifiers
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     Modified-site
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                     /note= "Wild-type Tyr replaced by 3-Pal (3-
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                     Pyridylalanine)"
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     Misc-difference 15
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                     /note= "Wild-type Glu replaced by Ala"
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     (TULA ) TULANE EDUCATIONAL FUND.
PΑ
     (SCRC ) SOC CONSEILS RECH & APPL SCI.
XX
PΙ
     Dong ZX, Coy DH;
XX
DR
     WPI; 2000-423382/36.
XX
PΤ
     Novel analogs of human glucagon-like peptide-1, useful for treatment of
PT
     e.g. diabetes types I or II, have better metabolic stability than the
PT
     native peptide.
XX
PS
     Claim 7; SEQ ID NO 94; 41pp; English.
XX
CC
     This invention relates to novel analogues of glucagon-like peptide-1 (GLP
CC
     -1) and their salts. The invention may be useful for the production of
CC
     compounds with an antidiabetic, anorectic, anti-arthritic,
CC
     antiproliferative, neuroprotective, antidiabetic, hepatotropic,
CC
     antiinflamatory, hypotensive, anabolic, osteopathic or nephrotropic
     activity acting as GLP-1 receptor agonists; they increase the release of
CC
     insulin and reduce secretion of glucagon, normalising glucose levels. The
CC
     invention may be useful for the treatment of obesity, glucagonomas,
CC
     secretory disorders of the airway, metabolic disorders, arthritis,
CC
     osteoporosis, central nervous system disease, restenosis,
CC
     neurodegeneration and, especially, diabetes types I and II, also renal
CC
     and congestive heart failures, nephrotic syndrome, cirrhosis, pulmonary
     edema, hypertension and diseases requiring a reduction in food intake.
```

```
CC
     Also some of the analogues have an antagonist effect at the GLP-1
CC
     receptor and can be used to treat hypoglycaemia and malabsorption
CC
     syndrome associated with gastectomy or small bowel resection. The
CC
     analogues of the invention are metabolically more stable than native GLP-
CC
     1 so have longer in vivo half-life. The present sequence is that of a
CC
     human GLP-1 peptide analogue of the invention.
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DT
     03-JUN-2004 (first entry)
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DE
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     antiproliferative; neuroprotective; antidiabetic; hepatotropic;
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     antiinflamatory; hypotensive; anabolic; osteopathic; nephrotropic;
KW
    GLP-1 receptor agonist; glucagon secretion; glucose level; obesity;
KW
    glucagonoma; airway secretory disorder; metabolic disorder; arthritis;
KW
    osteoporosis; central nervous system disease; restenosis;
KW
    neurodegeneration; diabetes type I; diabetes type II;
KW
     renal heart failure; congestive heart failure; nephrotic syndrome;
KW
    cirrhosis; pulmonary edema; hypertension; food intake; hypoglycaemia;
KW
    malabsorption syndrome; gastectomy; small bowel resection; human; mutant;
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     07-DEC-1998;
                   98US-0111186P.
XX
PA
     (TULA ) TULANE EDUCATIONAL FUND.
     (SCRC ) SOC CONSEILS RECH & APPL SCI.
PA
XX
PΙ
     Dong ZX, Coy DH;
XX
DR
     WPI; 2000-423382/36.
XX
PT
     Novel analogs of human glucagon-like peptide-1, useful for treatment of
     e.g. diabetes types I or II, have better metabolic stability than the
РΤ
     native peptide.
XX
PS
    Claim 7; SEQ ID NO 98; 41pp; English.
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     This invention relates to novel analogues of glucagon-like peptide-1 (GLP
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     -1) and their salts. The invention may be useful for the production of
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CC
     antiproliferative, neuroprotective, antidiabetic, hepatotropic,
CC
     antiinflamatory, hypotensive, anabolic, osteopathic or nephrotropic
CC
     activity acting as GLP-1 receptor agonists; they increase the release of
CC
     insulin and reduce secretion of glucagon, normalising glucose levels. The
CC
     invention may be useful for the treatment of obesity, glucagonomas,
CC
     secretory disorders of the airway, metabolic disorders, arthritis,
CC
     osteoporosis, central nervous system disease, restenosis,
CC
     neurodegeneration and, especially, diabetes types I and II, also renal
CC
     and congestive heart failures, nephrotic syndrome, cirrhosis, pulmonary
CC
     edema, hypertension and diseases requiring a reduction in food intake.
CC
     Also some of the analogues have an antagonist effect at the GLP-1
CC
     receptor and can be used to treat hypoglycaemia and malabsorption
CC
     syndrome associated with gastectomy or small bowel resection. The
CC
     analogues of the invention are metabolically more stable than native GLP-
CC
     1 so have longer in vivo half-life. The present sequence is that of a
CC
     human GLP-1 peptide analogue of the invention.
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     03-JUN-2004
                  (first entry)
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KW
     antiinflamatory; hypotensive; anabolic; osteopathic; nephrotropic;
KW
     GLP-1 receptor agonist; glucagon secretion; glucose level; obesity;
ΚW
     glucagonoma; airway secretory disorder; metabolic disorder; arthritis;
KW
     osteoporosis; central nervous system disease; restenosis;
KW
     neurodegeneration; diabetes type I; diabetes type II;
ΚW
     renal heart failure; congestive heart failure; nephrotic syndrome;
KW
     cirrhosis; pulmonary edema; hypertension; food intake; hypoglycaemia;
KW
     malabsorption syndrome; gastectomy; small bowel resection; human; mutant;
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                    98US-0111186P.
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PΑ
     (TULA ) TULANE EDUCATIONAL FUND.
PA
     (SCRC ) SOC CONSEILS RECH & APPL SCI.
XX
PΙ
     Dong ZX, Coy DH;
XX
DR
     WPI; 2000-423382/36.
XX
PT
     Novel analogs of human glucagon-like peptide-1, useful for treatment of
PT
     e.g. diabetes types I or II, have better metabolic stability than the
PT
     native peptide.
XX
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PS
    Claim 7; SEQ ID NO 104; 41pp; English.
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CC
     This invention relates to novel analogues of glucagon-like peptide-1 (GLP
CC
     -1) and their salts. The invention may be useful for the production of
CC
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CC
     antiproliferative, neuroprotective, antidiabetic, hepatotropic,
CC
     antiinflamatory, hypotensive, anabolic, osteopathic or nephrotropic
CC
     activity acting as GLP-1 receptor agonists; they increase the release of
CC
     insulin and reduce secretion of glucagon, normalising glucose levels. The
     invention may be useful for the treatment of obesity, glucagonomas,
CC
CC
     secretory disorders of the airway, metabolic disorders, arthritis,
CC
     osteoporosis, central nervous system disease, restenosis,
CC
     neurodegeneration and, especially, diabetes types I and II, also renal
CC
     and congestive heart failures, nephrotic syndrome, cirrhosis, pulmonary
CC
     edema, hypertension and diseases requiring a reduction in food intake.
CC
    Also some of the analogues have an antagonist effect at the GLP-1
CC
    receptor and can be used to treat hypoglycaemia and malabsorption
CC
     syndrome associated with gastectomy or small bowel resection. The
CC
     analogues of the invention are metabolically more stable than native GLP-
CC
     1 so have longer in vivo half-life. The present sequence is that of a
CC
     human GLP-1 peptide analogue of the invention.
XX
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DT
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ΚW
     antiinflamatory; hypotensive; anabolic; osteopathic; nephrotropic;
ΚW
     GLP-1 receptor agonist; glucagon secretion; glucose level; obesity;
KW
     glucagonoma; airway secretory disorder; metabolic disorder; arthritis;
ΚW
     osteoporosis; central nervous system disease; restenosis;
KW
     neurodegeneration; diabetes type I; diabetes type II;
     renal heart failure; congestive heart failure; nephrotic syndrome;
KW
ΚW
     cirrhosis; pulmonary edema; hypertension; food intake; hypoglycaemia;
KW
     malabsorption syndrome; gastectomy; small bowel resection; human; mutant;
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     (TULA ) TULANE EDUCATIONAL FUND.
PΑ
     (SCRC ) SOC CONSEILS RECH & APPL SCI.
XX
PΙ
     Dong ZX, Coy DH;
XX
DR
     WPI; 2000-423382/36.
XX
PT
     Novel analogs of human glucagon-like peptide-1, useful for treatment of
PT
     e.g. diabetes types I or II, have better metabolic stability than the
PT
     native peptide.
XX
PS
     Claim 7; SEQ ID NO 103; 41pp; English.
XX
CC
     This invention relates to novel analogues of glucagon-like peptide-1 (GLP
CC
     -1) and their salts. The invention may be useful for the production of
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     compounds with an antidiabetic, anorectic, anti-arthritic,
CC
     antiproliferative, neuroprotective, antidiabetic, hepatotropic,
CC
     antiinflamatory, hypotensive, anabolic, osteopathic or nephrotropic
CC
     activity acting as GLP-1 receptor agonists; they increase the release of \cdot.
CC
     insulin and reduce secretion of glucagon, normalising glucose levels. The
CC
     invention may be useful for the treatment of obesity, glucagonomas,
CC
     secretory disorders of the airway, metabolic disorders, arthritis,
CC
     osteoporosis, central nervous system disease, restenosis,
CC
     neurodegeneration and, especially, diabetes types I and II, also renal
CC
     and congestive heart failures, nephrotic syndrome, cirrhosis, pulmonary
CC
     edema, hypertension and diseases requiring a reduction in food intake.
CC
     Also some of the analogues have an antagonist effect at the GLP-1
CC
     receptor and can be used to treat hypoglycaemia and malabsorption
CC
     syndrome associated with gastectomy or small bowel resection. The
CC
     analogues of the invention are metabolically more stable than native GLP-
CC
     1 so have longer in vivo half-life. The present sequence is that of a
CC
     human GLP-1 peptide analogue of the invention.
XX
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ΚW
     GLP-1 receptor agonist; glucagon secretion; glucose level; obesity;
KW
     glucagonoma; airway secretory disorder; metabolic disorder; arthritis;
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     osteoporosis; central nervous system disease; restenosis;
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KW
     renal heart failure; congestive heart failure; nephrotic syndrome;
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PΑ
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XX
PΙ
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               Coy DH;
XX
DR
     WPI; 2000-423382/36.
XX
PT
     Novel analogs of human glucagon-like peptide-1, useful for treatment of
PT
     e.g. diabetes types I or II, have better metabolic stability than the
PT
     native peptide.
XX
PS
     Claim 7; SEQ ID NO 90; 41pp; English.
XX
CC
     This invention relates to novel analogues of glucagon-like peptide-1 (GLP
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CC
     antiproliferative, neuroprotective, antidiabetic, hepatotropic,
CC
     antiinflamatory, hypotensive, anabolic, osteopathic or nephrotropic
CC
     activity acting as GLP-1 receptor agonists; they increase the release of
CC
     insulin and reduce secretion of glucagon, normalising glucose levels. The
CC
     invention may be useful for the treatment of obesity, glucagonomas,
CC
     secretory disorders of the airway, metabolic disorders, arthritis,
CC
     osteoporosis, central nervous system disease, restenosis,
CC
     neurodegeneration and, especially, diabetes types I and II, also renal
CC
     and congestive heart failures, nephrotic syndrome, cirrhosis, pulmonary
CC
     edema, hypertension and diseases requiring a reduction in food intake.
CC
     Also some of the analogues have an antagonist effect at the GLP-1
CC
     receptor and can be used to treat hypoglycaemia and malabsorption
CÇ
     syndrome associated with gastectomy or small bowel resection. The
CC
     analogues of the invention are metabolically more stable than native GLP-
CC
     1 so have longer in vivo half-life. The present sequence is that of a
CC
     human GLP-1 peptide analogue of the invention.
· XX
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     antiproliferative; neuroprotective; antidiabetic; hepatotropic;
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     GLP-1 receptor agonist; glucagon secretion; glucose level; obesity;
KW
     glucagonoma; airway secretory disorder; metabolic disorder; arthritis;
     osteoporosis; central nervous system disease; restenosis;
KW
KW
     neurodegeneration; diabetes type I; diabetes type II;
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renal heart failure; congestive heart failure; nephrotic syndrome;
ΚW
KW
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start | next page

SCORE 1.3 BuildDate: 11/17/2006

SCORE Search Results Details for Application 09757788 and Search Result 20070122_145825_us-09-757-788a-1.rup.

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Retrieve Application

List

SCORE System <u>Overview</u>

SCORE FAQ

Comments / Suggestions

This page gives you Search Results detail for the Application 09757788 and Search Result 20070122_145825_us-09-757-788a-1.rup.

start | next page

Go Back to previous page

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OM protein - protein search, using sw model

Run on:

January 23, 2007, 03:13:34; Search time 300 Seconds

(without alignments)

120.252 Million cell updates/sec

Title:

US-09-757-788A-1

Perfect score: 41

Sequence:

Scoring table: BLOSUM62

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Searched:

2849598 seqs, 925015592 residues

Total number of hits satisfying chosen parameters:

2849598

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database :

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1: uniprot_sprot:*

2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | % Query Match | Length | DB | ID | Description |
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| . 3 | 32 | 78.0 | 180 | 1 | GLUC_BOVIN | P01272 b glucagon |

| | | | | | | • | | |
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| 7 | 32 | 78.0 | 180 | 1 | GLUC_MESAU | | | m glucagon |
| 8 | 32 | 78.0 | 180 | 1 | GLUC MOUSE | | P55095 | m glucagon |
| 9 | 32 | 78.0 | 180 | 1 | GLUC_OCTDE | • | | o glucagon |
| 10 | 32 | 78.0 | 180 | 1 | GLUC PIG | | | |
| | | | | | | | | s glucagon |
| 11 | 32 | 78.0 | 180 | 1 | GLUC_RAT | | | r glucagon |
| 12 | 32 | 78.0 | 180 | 2 | Q53TP6 HUMAN | | Q53tp6 | homo sapien |
| 13 | 32 | 78.0 | 180 | 2 | Q3T0X0 BOVIN | | 03t.0x0 | bos taurus |
| 14 | 32 | 78.0 | 180 | 2 | Q3UFE9_MOUSE | | | |
| | | | | | | | | mus musculu |
| 15 | 31 | 75.6 | 103 | 1 | GLUC_RANCA | | | rana catesb |
| 16 | 31 | 75.6 | 149 | 2 | Q6RYB2_BUFMA | | Q6ryb2 | bufo marinu |
| 17 | 31 | 75.6 | 160 | 1 | GLUC1 PETMA | | 09pur1 | petromyzon |
| 18 | 31 | 75.6 | 219 | 1 | GLUC2 XENLA | | | xenopus lae |
| | | | | | | | | |
| 19 | 31 | 75.6 | 219 | 2 | Q5D082_XENLA | | | xenopus lae |
| 20 | 31 | 75.6 | 220 | 2 | Q8UWL9_9NEOB | | Q8uwl9 | hoplobatrac |
| 21 | 31 | 75.6 | 266 | 1 | GLUC1 XENLA | | 042143 | xenopus lae |
| 22 | 31 | 75.6 | 266 | 2 | Q6DIZ4 XENTR | | | xenopus tro |
| 23 | 31 | 75.6 | 298 | 2 | | | | candida gla |
| | | | | | Q6FIP5_CANGA | | _ | _ |
| 24 | 30 | 73.2 | 29 | 1 | GLUC_ALLMI | | | alligator m |
| 25 | 30 | 73.2 | 29 | 1 | GLUC ANAPL | | P68952 | anas platyr |
| 26 | 30 | 73.2 | 29 | 1 | GLUC CAMDR | | P68273 | camelus dro |
| 27 | 30 | 73.2 | 29 | 1 | GLUC CHIBR | | | chinchilla |
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| 29 | 30 | 73.2 | 29 | 1 | GLUC_LAMFL | | Q9prq9 | lampetra fl |
| 30 | 30 | 73.2 | 29 | 1 | GLUC MELGA | • | P68260 | meleagris g |
| 31 | 30 | 73.2 | 29 | 1 | GLUC RABIT | | | oryctolagus |
| 32 | 30 | 73.2 | 29 | 1 | | | | saimiri sci |
| | | | | | GLUC_SAISC | | | |
| 33 | . 30 | 73.2 | 29 | 1 | GLUC_STRCA | | P68953 | struthio ca |
| 34 | 30 | 73.2 | 29 | 1 | GLUC TORMA | | P09567 | torpedo mar |
| 35 | 30 | 73.2 | 29 | 1 | GLUC TRASC | | P68955 | trachemys s |
| 36 | 30 | 73.2 | 30 | 2 | Q7LZN3 POLSP | | | polyodon sp |
| | | | | | | | | |
| 37 | 30 | 73.2 | 39 | 1 | EXE3_HELHO | | | heloderma h |
| 38 | 30 | 73.2 | 62 | 1 | GLUC_SCYCA | | P09687 | scyliorhinu |
| 39 | 30 | 73.2 | 87 | 2 | Q7SZU6_HELHR | | Q7szu6 | heloderma h |
| 40 | 30 | 73.2 | 96 | 1 | GLUC MYOSC | | | myoxocephal |
| 41 | 30 | 73.2 | | 2 | | | | |
| | | | 96 | | Q9DG43_AMBRU | | | ambloplites |
| 42 | 30 | 73.2 | 120 | 1 | GLUC2_PETMA | | | petromyzon |
| 43 | 30- | 73.2 | 121 | 2 | Q6RYC1_9PERC | | | sebastes ca |
| 44 | 30 | 73.2 | 124 | 1 | GLUC1 LOPAM | | P01278 | lophius ame |
| 45 | 30 | 73.2 | 124 | 2 | Q4S308_TETNG | | | tetraodon n |
| 46 | 30 | 73.2 | 124 | 2 | Q6RYB1 9SAUR | | | agkistrodon |
| | | | | | | | | |
| 47 | 30 | 73.2 | 151 | 2 | Q3HLJ2_MELGA | | - | meleagris g |
| 48 | 30 | 73.2 | 151 | 2 | Q3HWX1_CHICK | | Q3hwx1 | gallus gall |
| 49 | 30 | 73.2 | 155 | 1 | YKFB ECOLI | | P77162 | escherichia |
| 50 | 30 | 73.2 | . 176 | 2 | Q6RYB0_9PERC | | | sebastes ca |
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| | | | | | | | | |
| 56 | 30 | 73.2 | 280 | 2 | Q4FMT9_PELUB | | | pelagibacte |
| 57 | 30 | 73.2 | 381 | 2 | Q3WA76_9ACTO | | | frankia sp. |
| 58 | 29 | 70.7 | 71 | 1 | GLUC ICTPU | | P04093 | ictalurus p |
| 59 | 29 | 70.7 | 71 | 1 | GLUC PIAME | | | piaractus m |
| 60 | 29 | 70.7 | 72 | 1 | VIP CAVPO | | | cavia porce |
| | | | | | | | | |
| 61 | 29 | 70.7 | 72 | 1 | VIP_PIG | | | sus scrofa |
| 62 | 29 | 70.7 | 72 | 1 | VIP_RABIT | | | oryctolagus |
| 63 | 29 | 70.7 | 75 | 1 | GLUC AMICA | | P33528 | amia calva |
| 64 | 29 | 70.7 | 78 | 1 | GLUC LEPSP | | | lepisosteus |
| | | | | - | | | | |

| 65 | 29 | 70.7 | 87 | 1 | EXE4_HELSU | | heloderma s |
|------|------|------|-------|-----|---------------------------|--------|-------------|
| 66 | 29 | 70.7 | 118 | 2 | Q5TCY7_HUMAN | | homo sapien |
| 67 | 29 | 70.7 | 121 | 2 | Q5PR39_BRARE | Q5pr39 | brachydanio |
| 68 | 29 | 70.7 | 122 | 2 | Q6RYB8_ICTPU | | ictalurus p |
| 69 | 29 | 70.7 | 145 | 2 | Q7M2Y9_MACFA | Q7m2y9 | macaca fasc |
| 70 | 29 | 70.7 | 153 | 2 | Q7TSR4_9MURI | _ | arvicanthis |
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| .72 | 29 | 70.7 | 170 | 1 | VIP_BOVIN | P81401 | bos taurus |
| 73 | 29 | 70.7 | 170 | 1 | VIP_HUMAN | P01282 | homo sapien |
| 74 | 29 | 70.7 | 170 | 1 | VIP MOUSE | P32648 | mus musculu |
| 75 | 29 | 70.7 | 170 | 1 | VIP_RAT | P01283 | rattus norv |
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| . 77 | 29 | 70.7 | 172 | 2 | Q41ZP7_DESHA | Q41zp7 | desulfitoba |
| 78 | 29 | 70.7 | 173 | 2 | Q6RYB9 ICTPU | Q6ryb9 | ictalurus p |
| 79 | 29 | 70.7 | 178 | 1 | GLUC1 ONCMY | Q91971 | oncorhynchu |
| 80 | 29 | 70.7 | 178 | 1 | GLUC2 ONCMY | Q91189 | oncorhynchu |
| 81 | 29 | 70.7 | 206 | 1 | Y3335 STRAW | Q82i23 | streptomyce |
| 82 | 29 | 70.7 | 206 | 1 | Y4923 STRCO | Q9ewv6 | streptomyce |
| 83 | 29 | 70.7 | 208 | 2 | Q41W24 DESHA | Q41w24 | desulfitoba |
| 84 | 29 | 70.7 | 253 | 2 | Q8EN29 OCEIH | Q8en29 | oceanobacil |
| 85 | 29 | 70.7 | 256 | 2 | Q33JK3 METHU | Q33jk3 | methanospir |
| 86 | 29 | 70.7 | 258 | 2 . | Q491Y3 BLOPB | Q491y3 | blochmannia |
| 87 | 29 | 70.7 | 262 | 1 | TPIS BLOFL | Q7vrl0 | blochmannia |
| 88 | 29 | 70.7 | 267 | 2 | $Q5NQ\overline{Y}7$ ZYMMO | Q5nqy7 | zymomonas m |
| 89 | 29 | 70.7 | . 279 | 1 | FDHD NOCFA | Q5z057 | nocardia fa |
| 90 | 29 | 70.7 | .355 | 1 | GPA12_CAEBR | Q613v4 | caenorhabdi |
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| 92 | 29 | 70.7 | 415 | 2 | Q420KO_DESHA | Q420k0 | desulfitoba |
| 93 | 29 | 70.7 | 770 | 2 | Q4Q6F9_LEIMA | Q4q6f9 | leishmania |
| 94 | 29 | 70.7 | 1215 | 2 | Q4P9B0 USTMA | Q4p9b0 | ustilago ma |
| 95 | 29 | 70.7 | 1258 | 2 | Q9SSPO ARATH | Q9ssp0 | arabidopsis |
| 96 | 28 | 68.3 | 30 | 1 | GLUCL ANGAN | P63294 | anguilla an |
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| 99 | 28 | 68.3 | 31 | 2 | Q7LZN4 POLSP | Q71zn4 | polyodon sp |
| 100 | 28 | 68.3 | 66 | 2 | Q788W6-ONCTS | Q788w6 | oncorhynchu |
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ALIGNMENTS

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                                            45 AA.
ΙD
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AC
     Q6PPF4;
DT
     05-JUL-2004, integrated into UniProtKB/TrEMBL.
DT
     05-JUL-2004, sequence version 1.
DT
     07-FEB-2006, entry version 9.
DΕ
     Glucagon (Fragment).
     Capra hircus (Goat).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Ruminantia;
OC
OC
     Pecora; Bovidae; Caprinae; Capra.
OX
     NCBI TaxID=9925;
RN
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RP
     NUCLEOTIDE SEQUENCE.
     Ballester M., Castello A., Ibanez E., Sanchez A., Folch J.M.;
RA
RL
     Submitted (APR-2004) to the EMBL/GenBank/DDBJ databases.
CC
CC
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     Distributed under the Creative Commons Attribution-NoDerivs License
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    EMBL; AY588290; AAT00451.1; -; Genomic DNA.
DR
DR
    GO; GO:0005576; C:extracellular region; IEA.
    GO; GO:0005179; F:hormone activity; IEA.
DR
DR
    InterPro; IPR000532; Glucagon.
    Pfam; PF00123; Hormone 2; 1.
DR
    PRINTS; PR00275; GLUCAGON.
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FT
    NON TER
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                        1
    NON TER
                45
FT
                        45
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GLUC SHEEP
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                                         176 AA.
                   STANDARD;
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ID
AC
    Q8MJ25;
DT
    11-OCT-2004, integrated into UniProtKB/Swiss-Prot.
DT
    01-OCT-2002, sequence version 1.
DT
    07-FEB-2006, entry version 16.
DE
    Glucagon precursor [Contains: Glicentin; Glicentin-related polypeptide
DE
    (GRPP); Oxyntomodulin (OXY) (OXM); Glucagon; Glucagon-like peptide 1
DE
     (GLP-1); Glucagon-like peptide 1(7-37) (GLP-1(7-37)); Glucagon-like
DE
    peptide 1(7-36) (GLP-1(7-36)); Glucagon-like peptide 2 (GLP-2)]
DE
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    Name=GCG;
GN
OS
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OC
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OC
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OC
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OX
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RN
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RP
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RC
    TISSUE=Pancreas;
RA
    Limesand S.W., Hay W.W. Jr.;
RT
    "Characterization of the endocrine pancreas in an ovine placental
RT
    insufficiency IUGR fetus.";
RL
    Submitted (JUL-2002) to the EMBL/GenBank/DDBJ databases.
    -!- FUNCTION.: Glucagon plays a key role in glucose metabolism and
CC
СC
        homeostasis. Regulates blood glucose by increasing gluconeogenesis
CC
        and decreasing glycolysis. A counterregulatory hormone of insulin,
CC
        raises plasma glucose levels in response to insulin-induced
CC
        hypoglycemia (By similarity).
CC
     -!- FUNCTION: GLP-1 is a potent stimulator of glucose-dependent
CC
        insulin release. Play important roles on gastric motility and the
CC
        suppression of plasma glucagon levels. May be involved in the
CC
        suppression of satiety and stimulation of glucose disposal in
CC
        peripheral tissues, independent of the actions of insulin. Have
CC
        growth-promoting activities on intestinal epithelium. May also
        regulate the hypothalamic pituitary axis (HPA) via effects on LH,
CC
CC
        TSH, CRH, oxytocin, and vasopressin (By similarity).
CC
     -!- FUNCTION: GLP-2 stimulates intestinal growth and up-regulates
CC
        villus height in the small intestine, concomitant with increased
```

```
CC
        crypt cell proliferation and decreased enterocyte apoptosis. The
         gastrointestinal tract, from the stomach to the colon is the
CC
CC
        principal target for GLP-2 action. Plays a key role in nutrient
CC
        homeostasis, enhancing nutrient assimilation through enhanced
CC
         gastrointestinal function, as well as increasing nutrient
CC
        disposal. Stimulates intestinal glucose transport and decreases
CC
        mucosal permeability (By similarity).
CC
     -!- FUNCTION: Oxyntomodulin significantly reduces food intake (By
CC
         similarity).
CC
     -!- FUNCTION: Glicentin may modulate gastric acid secretion and
CC
         gastro-pyloro-duodenal activity.
CC
     -!- SUBCELLULAR LOCATION: Secreted protein.
CC.
     -!- TISSUE SPECIFICITY: Glucagon is secreted in the A cells of the
CC
         islets of Langerhans. GLP-1, GLP-2, oxyntomodulin and glicentin
         are secreted from enteroendocrine cells throughout the
CC
CC
         gastrointestinal tract. GLP1 and GLP2 are also secreted in
CC
         selected neurons in the brain.
CC
     -!- INDUCTION: Glucagon release is stimulated by hypoglycemia and
CC
         inhibited by hyperglycemia, insulin, and somatostatin. GLP-1 and
CC
         GLP-2 are induced in response to nutrient ingestion (By
CC
         similarity).
CC
     -!- PTM: Proglucagon is posttranslationally processed in a tissue-
CC
         specific manner in pancreatic A cells and intestinal L cells. In
         pancreatic A cells, the major bioactive hormone is glucagon
CC
CC
         cleaved by PCSK2/PC2. In the intestinal L cells PCSK1/PC1
         liberates GLP-1, GLP-2, glicentin and oxyntomodulin. GLP-1 is
CC
CC
         further N-terminally truncated by posttranslational processing in
CC
         the intestinal L cells resulting in GLP-1(7-37) GLP-1-(7-36) amide.
CC
         The C-terminal amidation is neither important for the metabolism
CC
         of GLP-1 nor for its effects on the endocrine pancreas (By
CC
         similarity).
CC
     -!- MISCELLANEOUS: GLP-2 does not have cleavage on a pair of basic
CC
         residues at C-terminus as in other mammmals.
CC
     -!- SIMILARITY: Belongs to the glucagon family.
CC
     -----
CC
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CC
     Distributed under the Creative Commons Attribution-NoDerivs License
CC
DR
     EMBL; AF529185; AAM94409.1; -; mRNA.
DR
     InterPro; IPR000532; Glucagon.
DR
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DR
     PRINTS; PR00275; GLUCAGON.
DR
     SMART; SM00070; GLUCA; 3.
DR
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                                  similarity).
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                                   similarity).
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FT
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                                   /FTId=PRO 0000011321.
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                                   Glucagon-like peptide 2 (By similarity).
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                                   /FTId=PRO 0000011322.
FT
     SITE
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                                   Cleavage (by PCSK2) (By similarity).
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                  83
                          84
                                   Cleavage (by PCSK1 and PCSK2) (By
FT
                                   similarity).
FT
     SITE
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                          .92
                                   Cleavage (by PCSK1) (By similarity).
FT
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                  97 .
                          98
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FT
     SITE
                 130
                         131
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FT
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                 145
                         146
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FT
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                        127
                                   Arginine amide (G-128 provides amide
FT
                                   group) (By similarity).
FT
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                 176
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SQ
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              1 1 11 1
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Db
RESULT 3
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DT
     21-JUL-1986, integrated into UniProtKB/Swiss-Prot.
DT
     13-AUG-1987, sequence version 1.
DT
     07-FEB-2006, entry version 55.
DΕ
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DΕ
     (GRPP); Oxyntomodulin (OXY) (OXM); Glucagon; Glucagon-like peptide 1
DE
     (GLP-1); Glucagon-like peptide 1(7-37) (GLP-1(7-37)); Glucagon-like
DΕ
     peptide 1(7-36) (GLP-1(7-36)); Glucagon-like peptide 2 (GLP-2)].
GN
     Name=GCG;
OS
     Bos taurus (Bovine).
OC
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OC
     Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Ruminantia;
OC
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OX
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RX
     MEDLINE=83299996; PubMed=6577439;
     Lopez L.C., Frazier M.L., Su C.-J., Kumar A., Saunders G.F.;
RA
RT
     "Mammalian pancreatic preproglucagon contains three glucagon-related
RT
     peptides.";
RL
     Proc. Natl. Acad. Sci. U.S.A. 80:5485-5489(1983).
RN
RP
     PROTEIN SEQUENCE OF 53-81.
RX
     MEDLINE=71166445; PubMed=5102927;
RA
     Bromer W.W., Boucher M.E., Koffenberger J.E. Jr.;
RT
     "Amino acid sequence of bovine glucagon.";
RL
     J. Biol. Chem. 246:2822-2827(1971).
RN
     [3]
RP
     REVIEW.
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MEDLINE=22442611; PubMed=12554744; DOI=10.1210/me.2002-0306;
RA
    Drucker D.J.;
RT
    "Glucagon-like peptides: regulators of cell proliferation,
    differentiation, and apoptosis.";
RT
    Mol. Endocrinol. 17:161-171(2003).
RL
RN
RP
    REVIEW.
    MEDLINE=22513095; PubMed=12626323; DOI=10.1152/ajpendo.00492.2002;
RA
     Jiang G., Zhang B.B.;
     "Glucagon and regulation of glucose metabolism.";
RT
    Am. J. Physiol. 284:E671-E678(2003).
RL
RN
RΡ
    REVIEW.
RX
    PubMed=10322410;
RA
    Drucker D.J.;
RT
    "Glucagon-like peptide 2.";
RL
    Trends Endocrinol. Metab. 10:153-156(1999).
RN
RP
    REVIEW.
    MEDLINE=20073561; PubMed=10605628; DOI=10.1210/er.20.6.876;
RX
    Kieffer T.J., Habener J.F.;
RA
RT
     "The glucagon-like peptides.";
     Endocr. Rev. 20:876-913(1999).
RL
RN
RP
    STRUCTURE BY NMR OF 53-81.
    MEDLINE=71166445; PubMed=6631957;
RX
RA
    Braun W., Wider G., Lee K.H., Wuethrich K.;
RT
    "Conformation of glucagon in a lipid-water interphase by 1H nuclear
RT
    magnetic resonance.";
RL
    J. Mol. Biol. 169:921-948(1983).
CC
    -!- FUNCTION: Glucagon plays a key role in glucose metabolism and
        homeostasis. Regulates blood glucose by increasing gluconeogenesis
CC
         and decreasing glycolysis. A counterregulatory hormone of insulin,
CC
         raises plasma glucose levels in response to insulin-induced
CC
        hypoglycemia (By similarity).
CC
     -!- FUNCTION: GLP-1 is a potent stimulator of glucose-dependent
CC
         insulin release. Play important roles on gastric motility and the
CC
         suppression of plasma glucagon levels. May be involved in the
CC
         suppression of satiety and stimulation of glucose disposal in
CC
        peripheral tissues, independent of the actions of insulin. Have
CC
         growth-promoting activities on intestinal epithelium. May also
CC
         regulate the hypothalamic pituitary axis (HPA) via effects on LH,
CC
         TSH, CRH, oxytocin, and vasopressin secretion. Increases islet
CC
        mass through stimulation of islet neogenesis and pancreatic beta
CC
        cell proliferaton (By similarity).
CC
     -!- FUNCTION: GLP-2 stimulates intestinal growth and up-regulates
CC
         villus height in the small intestine, concomitant with increased
CC
         crypt cell proliferation and decreased enterocyte apoptosis. The
CC
         gastrointestinal tract, from the stomach to the colon is the
CC
        principal target for GLP-2 action. Plays a key role in nutrient
CC
        homeostasis, enhancing nutrient assimilation through enhanced
CC
         gastrointestinal function, as well as increasing nutrient
CC
         disposal. Stimulates intestinal glucose transport and decreases
CC
        mucosal permeability (By similarity).
CC
     -!- FUNCTION: Oxyntomodulin significantly reduces food intake (By
CC
        similarity).
CC
     -!- FUNCTION: Glicentin may modulate gastric acid secretion and
CC
         gastro-pyloro-duodenal activity.
     -!- SUBCELLULAR LOCATION: Secreted protein.
CC
CC
     -!- TISSUE SPECIFICITY: Glucagon is secreted in the A cells of the
CC
         islets of Langerhans. GLP-1, GLP-2, oxyntomodulin and glicentin
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CC
         are secreted from enteroendocrine cells throughout the
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         gastrointestinal tract.
CC
     -!- INDUCTION: Glucagon release is stimulated by hypoglycemia and
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       inhibited by hyperglycemia, insulin, and somatostatin. GLP-1 and
CC
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CC
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         specific manner in pancreatic A cells and intestinal L cells. In
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CC
         cleaved by PCSK2/PC2. In the intestinal L cells PCSK1/PC1
CC
         liberates GLP-1, GLP-2, glicentin and oxyntomodulin. GLP-1 is
CC
         further N-terminally truncated by posttranslational processing in
CC
         the intestinal L cells resulting in GLP-1(7-37) GLP-1-(7-36) amide.
CC
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RL
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     -!- FUNCTION: Glucagon plays a key role in glucose metabolism and
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CC
         and decreasing glycolysis. A counterregulatory hormone of insulin,
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         raises plasma glucose levels in response to insulin-induced
CC
         hypoglycemia (By similarity).
CC
     -!- FUNCTION: GLP-1 is a potent stimulator of glucose-dependent
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CC
CC
         suppression of plasma glucagon levels. May be involved in the
CC
         suppression of satiety and stimulation of glucose disposal in
CC
         peripheral tissues, independent of the actions of insulin. Have
CC
         growth-promoting activities on intestinal epithelium. May also
CC
         regulate the hypothalamic pituitary axis (HPA) via effects on LH,
CC
         TSH, CRH, oxytocin, and vasopressin secretion. Increases islet
CC
         mass through stimulation of islet neogenesis and pancreatic beta
CC
         cell proliferaton (By similarity).
CC
     -!- FUNCTION: GLP-2 stimulates intestinal growth and up-regulates
CC
         villus height in the small intestine, concomitant with increased
CC
         crypt cell proliferation and decreased enterocyte apoptosis. The
CC
         gastrointestinal tract, from the stomach to the colon is the
CC
         principal target for GLP-2 action. Plays a key role in nutrient
CC
         homeostasis, enhancing nutrient assimilation through enhanced
CC
         gastrointestinal function, as well as increasing nutrient
CC
         disposal. Stimulates intestinal glucose transport and decreases
CC
         mucosal permeability (By similarity).
CC
     -!- FUNCTION: Oxyntomodulin significantly reduces food intake (By
CC
         similarity).
CC
     -!- FUNCTION: Glicentin may modulate gastric acid secretion and
CC
         gastro-pyloro-duodenal activity.
CC
     -!- SUBCELLULAR LOCATION: Secreted protein.
CC
     -!- TISSUE SPECIFICITY: Glucagon is secreted in the A cells of the
         islets of Langerhans. GLP-1, GLP-2, oxyntomodulin and glicentin
CC
         are secreted from enteroendocrine cells throughout the
CC
         gastrointestinal tract. GLP1 and GLP2 are also secreted in
CC
         selected neurons in the brain.
CC
     -!- INDUCTION: Glucagon release is stimulated by hypoglycemia and
         inhibited by hyperglycemia, insulin, and somatostatin. GLP-1 and
CC
CC
         GLP-2 are induced in response to nutrient ingestion (By
CÇ
         similarity).
CC
     -!- PTM: Proglucagon is posttranslationally processed in a tissue-
CC
         specific manner in pancreatic A cells and intestinal L cells. In
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pancreatic A cells, the major bioactive hormone is glucagon

CC

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CC
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CC
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         further N-terminally truncated by posttranslational processing in
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CC
         The C-terminal amidation is neither important for the metabolism
CC
         of GLP-1 nor for its effects on the endocrine pancreas (By
CC
CC
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     Copyrighted by the UniProt Consortium, see http://www.uniprot.org/terms
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     Distributed under the Creative Commons Attribution-NoDerivs License
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     MEDLINE=22442611; PubMed=12554744; DOI=10.1210/me.2002-0306;
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     "Glucagon-like peptides: regulators of cell proliferation,
RT
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RN
RP
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     MEDLINE=22513095; PubMed=12626323; DOI=10.1152/ajpendo.00492.2002;
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     "Glucagon and regulation of glucose metabolism.";
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CC
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CC
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CC
        and decreasing glycolysis. A counterregulatory hormone of insulin,
CC
        raises plasma glucose levels in response to insulin-induced
CC
        hypoglycemia (By similarity).
CC
    -!- FUNCTION: GLP-1 is a potent stimulator of glucose-dependent
СC
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CC
        suppression of plasma glucagon levels. May be involved in the
CC
        suppression of satiety and stimulation of glucose disposal in
CC .
        peripheral tissues, independent of the actions of insulin. Have
CC
        growth-promoting activities on intestinal epithelium. May also
CC
        regulate the hypothalamic pituitary axis (HPA) via effects on LH,
CC
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        mass through stimulation of islet neogenesis and pancreatic beta
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        gastrointestinal tract, from the stomach to the colon is the
CC
        principal target for GLP-2 action. Plays a key role in nutrient
CC
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CC
CC
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CC
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CC
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CC
    -!- FUNCTION: Glicentin may modulate gastric acid secretion and
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    -!- SUBCELLULAR LOCATION: Secreted protein.
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CC
        GLP-2 are induced in response to nutrient ingestion (By
CC
        similarity).
CC
    -!- PTM: Proglucagon is posttranslationally processed in a tissue-
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CC
        pancreatic A cells, the major bioactive hormone is glucagon
CC
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CC
        liberates GLP-1, GLP-2, glicentin and oxyntomodulin. GLP-1 is
CC
        further N-terminally truncated by posttranslational processing in
CC
        the intestinal L cells resulting in GLP-1(7-37) GLP-1-(7-36) amide.
CC
        The C-terminal amidation is neither important for the metabolism
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CC
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    Copyrighted by the UniProt Consortium, see http://www.uniprot.org/terms
CC
    Distributed under the Creative Commons Attribution-NoDerivs License
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              Db
           98 HAEGTFTSDVSSYLEGQAAKEFI 120
RESULT 6
GLUC HUMAN
                    STANDARD;
ΙD
    GLUC HUMAN
                                    PRT;
                                           180 AA.
    P01275;
AC
    21-JUL-1986, integrated into UniProtKB/Swiss-Prot.
DT
     15-MAR-2004, sequence version 2.
DT
     21-FEB-2006, entry version 70.
DΕ
    Glucagon precursor [Contains: Glicentin; Glicentin-related polypeptide
DE
     (GRPP); Oxyntomodulin (OXY) (OXM); Glucagon; Glucagon-like peptide 1
DE
     (GLP-1); Glucagon-like peptide 1(7-37) (GLP-1(7-37)); Glucagon-like
DE
    peptide 1(7-36) (GLP-1(7-36)); Glucagon-like peptide 2 (GLP-2)].
GN
    Name=GCG;
OS
    Homo sapiens (Human).
OC
    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
    Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC
OC
    Homo.
```

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OX
     NCBI TaxID=9606;
RN
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RP
     NUCLEOTIDE SEQUENCE.
     MEDLINE=88330860; PubMed=2901414;
RX
RA
     Drucker D.J., Asa S.;
     "Glucagon gene expression in vertebrate brain.";
RT
     J. Biol. Chem. 263:13475-13478(1988).
RN
RP
     NUCLEOTIDE SEOUENCE.
RX
     MEDLINE=86259053; PubMed=3725587;
RA
     White J.W., Saunders G.F.;
RT
     "Structure of the human glucagon gene.";
RL
     Nucleic Acids Res. 14:4719-4730(1986).
RN
RP
     NUCLEOTIDE SEQUENCE.
RC
     TISSUE=Liver;
RX
     MEDLINE=83271477; PubMed=6877358;
RA:
     Bell G.I., Sanchez-Pescador R., Laybourn P.J., Najarian R.C.;
     "Exon duplication and divergence in the human preproglucagon gene.";
RL.
     Nature 304:368-371(1983).
RN
     [4]
RP
     NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
     Kalnine N., Chen X., Rolfs A., Halleck A., Hines L., Eisenstein S.,
RA
     Koundinya M., Raphael J., Moreira D., Kelley T., LaBaer J., Lin Y.,
     Phelan M., Farmer A.;
RA
RT
     "Cloning of human full-length CDSs in BD Creator(TM) system donor
RT
     vector.";
RL
     Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
RN
     NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RP
RC
     TISSUE=Pancreas;
    MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RX
RA
     Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA
     Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
     Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA
     Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA
     Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA
     Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA
     Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA
     Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA
     Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA
     Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA
     Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA
     Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA
     Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
     Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA
     Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA
     Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA
     Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT
     "Generation and initial analysis of more than 15,000 full-length human
     and mouse cDNA sequences.";
RL
     Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN
RΡ
     PROTEIN SEQUENCE OF 53-81.
RX
     PubMed=11946536;
     Thomsen J., Kristiansen K., Brunfeldt K., Sundby F.;
     "The amino acid sequence of human glucagon.";
RT
RL
     FEBS Lett. 21:315-319(1972).
RN
     [7]
RP
     PROTEIN SEQUENCE OF 98-127.
    MEDLINE=89327238; PubMed=2753890;
```

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Orskov C., Bersani M., Johnsen A.H., Hoejrup P., Holst J.J.;
RT
     "Complete sequences of glucagon-like peptide-1 from human and pig
RT
     small intestine.";
RL
     J. Biol. Chem. 264:12826-12829(1989).
RN
     FUNCTION OF GLP1 BIOACTIVE FORMS.
RP
     MEDLINE=93246081; PubMed=8482423;
RX
     Orskov C., Wettergren A., Holst J.J.;
RT
     "Biological effects and metabolic rates of glucagonlike peptide-1 7-36
RT
     amide and glucagonlike peptide-1 7-37 in healthy subjects are
RT
     indistinguishable.";
RL
     Diabetes 42:658-661(1993).
RN
RP
     FUNCTION OF OXYNTOMODULIN.
RX
     MEDLINE=22919492; PubMed=14557443; DOI=10.1210/jc.2003-030421;
RA
     Cohen M.A., Ellis S.M., Le Roux C.W., Batterham R.L., Park A.,
RA
     Patterson M., Frost G.S., Ghatei M.A., Bloom S.R.;
RT
     "Oxyntomodulin suppresses appetite and reduces food intake in
RT
     humans.";
RL
     J. Clin. Endocrinol. Metab. 88:4696-4701(2003).
RN
    [10]
RP
     FUNCTION OF GLICENTIN.
RX
     MEDLINE=22993785; PubMed=14632334; DOI=10.1080/08035250310000514;
     Tadokoro R., Shimizu T., Hosaka A., Kaneko N., Satoh Y., Yamashiro Y.;
RA
     "Postnatal and postprandial changes in plasma concentrations of
RT
RT
     glicentin in term and preterm infants.";
RL
     Acta Paediatr. 92:1175-1179(2003).
RN
     [11]
RP
     PROCESSING BY PCSK2.
RX
     MEDLINE=97431623; PubMed=9287128; DOI=10.1016/S0014-5793(97)00892-2;
RA
     Rouille Y., Bianchi M., Irminger J.C., Halban P.A.;
RT
     "Role of the prohormone convertase PC2 in the processing of
RT
     proglucagon to glucagon.";
RL
     FEBS Lett. 413:119-123(1997).
RN
RP
     PROCESSING BY PCSK1.
     MEDLINE=22538931; PubMed=12651102; DOI=10.1016/S1046-5928(02)00653-8;
RX
     Bonic A., Mackin R.B.;
RA
RT
     "Expression, purification, and PC1-mediated processing of human
RT
     proglucagon, glicentin, and major proglucagon fragment.";
RL
     Protein Expr. Purif. 28:15-24(2003).
RN
     [13]
RP
     REVIEW.
RX
     PubMed=14719035; DOI=10.1139/y03-107;
RA
     Brubaker P.L., Anini Y.;
     "Direct and indirect mechanisms regulating secretion of glucagon-like
RT
RT
     peptide-1 and glucagon-like peptide-2.";
     Can. J. Physiol. Pharmacol. 81:1005-1012(2003).
RL
RN
     [14]
RP
     REVIEW.
     MEDLINE=22442611; PubMed=12554744; DOI=10.1210/me.2002-0306;
RX
RA
     Drucker D.J.;
RT
     "Glucagon-like peptides: regulators of cell proliferation,
RT
     differentiation, and apoptosis.";
RL
     Mol. Endocrinol. 17:161-171(2003).
RN
     [15]
RP
     REVIEW.
     MEDLINE=22513095; PubMed=12626323; DOI=10.1152/ajpendo.00492.2002;
RX
     Jiang G., Zhang B.B.;
     "Glucagon and regulation of glucose metabolism.";
RT
     Am. J. Physiol. 284:E671-E678(2003).
RL
```

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RN
     [16]
    REVIEW.
RP
RX
    PubMed=10322410;
    Drucker D.J.;
RA
     "Glucagon-like peptide 2.";
RT
    Trends Endocrinol. Metab. 10:153-156(1999).
RL
RN
     [17]
RΡ
    REVIEW.
    MEDLINE=20073561; PubMed=10605628; DOI=10.1210/er.20.6.876;
RX
    Kieffer T.J., Habener J.F.;
RA
RT . "The glucagon-like peptides.";
    Endocr. Rev. 20:876-913(1999).
RL
RN
RΡ
    X-RAY CRYSTALLOGRAPHY (3.0 ANGSTROMS) OF 53-81.
    MEDLINE=98334683; PubMed=9667960; DOI=10.1021/jm980084a;
RX
    Sturm N.S., Lin Y., Burley S.K., Krstenansky J.L., Ahn J.-M.,
RΑ
RA
    Azizeh B.Y., Trivedi D., Hruby V.J.;
RT
     "Structure-function studies on positions 17, 18, and 21 replacement
RT
    analogues of glucagon: the importance of charged residues and salt
RΤ
    bridges in glucagon biological activity.";
RL
    J. Med. Chem. 41:2693-2700(1998).
RN
RP
    STRUCTURE BY NMR OF 98-127.
RX
    MEDLINE=21940600; PubMed=11943215; DOI=10.1016/S0014-5793(02)02466-3;
    Chang X., Keller D., O'Donoghue S.I., Led J.J.;
RA
RT
     "NMR studies of the aggregation of glucagon-like peptide-1: formation
RT
    of a symmetric helical dimer.";
RL
     FEBS Lett. 515:165-170(2002).
RN
     [20]
RP
    STRUCTURE BY NMR OF GLUCAGON ANTAGONIST.
    MEDLINE=22515400; PubMed=12627948; DOI=10.1021/bi026629r;
RX
    Ying J., Ahn J.-M., Jacobsen N.E., Brown M.F., Hruby V.J.;
RA
RT
    "NMR solution structure of the glucagon antagonist [desHisl, desPhe6,
    Glu9]glucagon amide in the presence of perdeuterated
RT
    dodecylphosphocholine micelles.";
    Biochemistry 42:2825-2835(2003).
RL
CC
    -!- FUNCTION: Glucagon plays a key role in glucose metabolism and
CC
         homeostasis. Regulates blood glucose by increasing gluconeogenesis
CC
         and decreasing glycolysis. A counterregulatory hormone of insulin,
CC
         raises plasma glucose levels in response to insulin-induced
```

start | next page

SCORE 1.3 BuildDate: 11/17/2006 Score Home Page Retrieve Application List SCORE System Overview SCORE FAQ Comments / Sugg

This page gives you Search Results detail for the Application 09757788 and Search Result 2007012 start | next page

> GenCore version 5.1.9 Copyright (c) 1993 - 2007 Biocceleration Ltd.

OM protein - protein search, using sw model

Run on: January 23, 2007, 03:17:09; Search time 37 Seconds

(without alignments)

101.418 Million cell updates/sec

Title: US-09-757-788A-1

Perfect score: 41

Sequence:

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

PIR 80:* Database :

1: pir1:*

2: pir2:*

3: pir3:*

4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | % Query Match | Length | DB | IĎ | Description |
|---------------|--------|---------------------|--------|----|--------|--------------------|
| 1 | 32 | 78.0 | 158 | 1 | GCPG | glucagon precursor |
| 2 | 32 | 78.0 | 180 | 1 | GCBO | glucagon precursor |
| 3 | 32 | 78.0 | 180 | 1 | GCHY | glucagon precursor |
| 4 | 32 | 78.0 | 180 | 1 | GCGP | glucagon precursor |
| 5 | 32 | 78.0 | 180 | 1 | GCHU | glucagon precursor |
| 6 | 32 | 78.0 | 180 | 1 | GCRT | glucagon precursor |
| 7 | 32 | 78.0 | 180 | 1 | GCRTDU | glucagon precursor |

| 8 9 10 11 12 13 14 15 16 17 18 19 20 21 | 32 31 30 30 30 30 30 30 30 30 30 30 30 30 30 | 78.0 75.6 73.2 73.2 73.2 73.2 73.2 73.2 73.2 73.2 | 180 101 29 29 29 29 29 29 29 29 29 | 2 1 1 1 1 1 1 2 2 2 2 2 2 2 | A57294 GCFGB A61583 GCCB GCDF GCDK GCOPV GCTTS A91740 S07211 C39258 A91742 A91741 S44473 | | | | glucagon precursor glucagon precursor glucagon - ostrich glucagon - Chinchi glucagon - smaller glucagon - duck glucagon - North A glucagon - slider glucagon - turkey glucagon - marbled glucagon - common glucagon - Arabian glucagon - rabbit glucagon-like pept |
|--|--|--|--|--|--|---|---|---|--|
| 23 | 30 | 73.2 | 39 69 | 1 1 | HWGH3Z GCDG69 | | • | | exendin-3 - Mexica glucagon-69 - dog |
| 24 25 26 | 30 30 30 | 73.2 73.2 73.2 | 87 124 151 | 1 1 1 | GCFIS GCAF GCCH | | | | glucagon precursor glucagon 1 precurs glucagon precursor |
| 27 -28 | 30 | 73.2 73.2 | 155 | 2 | B64750 | | | | ykfB protein - Esc |
| 29 | 30 29 | 70.7 | 206 29 | 2 2 | I51301 C60840 | | | | proglucagon - chic glucagon I - Europ |
| 30 | 29 | 70.7 | 29 | 2 | S39018 | | | | glucagon - bowfin |
| 31 32 | 29 29 | 70.7 70.7 | 36 39 | 2 1 | D60840 HWGH4G | | | | glucagon II - Euro exendin-4 - Gila m |
| 33 | 29 | 70.7 | 55 | 1 | VRBO | | | | vasoactive intesti |
| 34 | 29 | 70.7 | 55 | 1 | VRRB | | | | vasoactive intesti |
| 35 | 29 | 70.7 | 55 | 1 | VRGP | | | • | vasoactive intesti |
| 36 37 | 29 29 | 70.7 70.7 | 55 58 | 1 1 | VRSH | | | | vasoactive intesti |
| 38 | 29 | 70.7 | 63 | 1 | VRPG GCIDC | • | | | vasoactive intesti glucagon precursor |
| 39 | 29 | 70.7 | 72 | 1 | GCGXA | ٠ | | | glucagon precursor |
| 40 | 29 | 70.7 | 145 | 2 | A60038 | | | | vasoactive intesti |
| 41 42 | 29 | 70.7 | 170 | 1 | VRHU | | | | vasoactive intesti |
| 43 | 29 29 | 70.7 70.7 | 170 170 | 1 2 | VRRT A60037 | | | | vasoactive intesti vasoactive intesti |
| 44 | 29 | 70.7 | 178 | 2 | I51057 | | | | glucagon II precur |
| 45 | 29 | 70.7 | 178 | 2 | I51058 | | | | glucagon I precurs |
| 46 47 | 29 29 | 70.7 70.7 | 343 1258 | 2 | D89605 F96753 | | | | protein F18G5.3 [i Similar to downy m |
| 48 | 28 | 68.3 | 30 | 2 | C61125 | | | | glucagon-like pept |
| 49 | 28 | 68,.3 | 30 | 2 | B61125 | | | | glucagon-like pept |
| 50 | 28 | 68.3 | 31 | 2 | S44471 | | | | glucagon G1 - Nort |
| 51 52 | 28 .28 | 68.3 68.3 | 31 66 | 2 2 | S44472 I51093 | | | | glucagon G2 - Nort glucagon - chinook |
| 53 | 28 | 68.3 | 122 | 1 | GCAF2 | | | | glucagon 2 precurs |
| 54 · | 28 | | 157 | 2 | T17883 | | | | major capsid prote |
| 55 | 28 | 68.3 | 451 | 2 | Н89798 | | | | conserved hypothet |
| ·56 | 28 | 68.3 | 1224 | 2 | T07446 | | | | DNA-directed RNA p |
| 57 58 | 28 27 | 68.3 65.9 | 1386 17 | 1 2 | RNLVC2 A60317 | • | | | DNA-directed RNA p glucagon-like pept |
| 59 | 27 | 65.9 | 38 | 1 | GCFIK | | | | glucagon-like pept |
| 60 | 27 | 65.9 | 123 | 2 | S29304 | | | | hypothetical prote |
| 61 | 27 | 65.9 | 158 | 2 | E70068 | | | | transcription regu |
| 62 63 | 27 27 | 65.9 65.9 | 221 246 | 2 1 | T26921 S01789 | | | | hypothetical prote formate acetyltran |
| 64 | 27 | 65.9 | 246 | 2 | G85615 | • | | | pyruvate formate l |
| 65 | 27 | 65.9 | 246 | 2 | A99752 | | | | pyruvate formate 1 |
| 66 67 | 27 . | 65.9 | 265 | 2 | AH0612 | | | | pyruvate formate-l |
| 67 68 | 27 27 | 65.9 65.9 | 642 1326 | 2 | S11386 B56395 | | | | sucrose alpha-gluc secretory phosphol |
| 30 | ٠, | 55.5 | 1020 | - | | | | | coccoci, buobiot |

| 69 | 27 | 65.9 | 1458 | 1 | A49707 | phospholipase A2 r |
|-----|------|------|-------|---|--------|--------------------|
| 70 | 27. | 65.9 | 1465 | 2 | A56395 | secretory phosphol |
| 71 | 27 | 65.9 | 1827 | 1 | A23945 | sucrose alpha-gluc |
| 72 | 27 | 65.9 | 1841 | 2 | T10799 | sucrose alpha-gluc |
| 73 | 26 | 63.4 | 27 | 1 | S07443 | secretin - human |
| 74 | 26 | 63.4 | 27 | 1 | SEBO | secretin - bovine |
| 75 | 26 | 63.4 | 27 | 1 | SESH | secretin - sheep |
| 76 | 26 | 63.4 | 27 | 2 | A27267 | secretin - dog |
| 77 | 26 | 63.4 | 29 | 1 | GCEN | glucagon - elephan |
| 78 | 26 | 63.4 | 131 | 1 | SEPG | secretin precursor |
| 79 | 26 | 63.4 | 134 | 2 | A40959 | secretin precursor |
| 80 | 26 | 63.4 | 209 | 2 | A72366 | hypothetical prote |
| 81 | 26 | 63.4 | 261 | 2 | A70916 | probable tpi prote |
| 82 | 26 | 63.4 | 265 | 2 | H82048 | triosephosphate is |
| 83 | 26 | 63.4 | . 370 | 2 | T21374 | hypothetical prote |
| 84 | 26 | 63.4 | 663 | 1 | XJECTK | transketolase (EC |
| 85 | 26 | 63.4 | 663 | 2 | AD0876 | transketolase [imp |
| 86 | 26 | 63.4 | 663 | 2 | E85950 | transketolase 1 is |
| 87 | 26 | 63.4 | 663 | 2 | B91105 | transketolase 1 is |
| 88 | 26 | 63.4 | 664 | 2 | AG0113 | transketolase (EC |
| 89 | 26 | 63.4 | 689 | 2 | T52060 | protein MEDEA [imp |
| 90 | 26 | 63.4 | 753 | 2 | A96747 | probable RNA-bindi |
| 91 | 26 | 63.4 | 1463 | 2 | A53210 | phospholipase A2 r |
| 92 | 26 | 63.4 | 3871 | 2 | T22812 | hypothetical prote |
| 93 | 25 | 61.0 | 27 | 1 | SECH | secretin - chicken |
| 94 | · 25 | 61.0 | 29 | 1 | GCFLE | glucagon - Europea |
| 95 | 25 | 61.0 | 29 | 2 | A61135 | glucagon - bigeye |
| 96 | 25 | 61.0 | 36 | 1 | GCFI | glucagon-36 - spot |
| 97 | 25 | 61.0 | 60 | 1 | GCONC | glucagon precursor |
| 98 | 25. | 61.0 | 65 | 2 | S17441 | hypothetical prote |
| 99 | 25 | 61.0 | 121 | 2 | S18751 | chitinase (EC 3.2. |
| 100 | 25 | 61.0 | 133 | 2 | JC2202 | secretin precursor |
| | | | | | | |

ALIGNMENTS

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RESULT 1
GCPG
glucagon precursor - pig (fragment)
N; Alternate names: glicentin; oxyntomodulin
N; Contains: glicentin-related peptide; glucagon; glucagon-37 (oxyntomodulin); glucagon
C; Species: Sus scrofa domestica (domestic pig)
C;Date: 17-Dec-1982 #sequence revision 31-Mar-1993 #text change 20-Mar-1998
C; Accession: A01540; A60312; A91781; B32614; A28064
R; Thim, L.; Moody, A.J.
Regul. Pept. 2, 139-150, 1981
A; Title: The primary structure of porcine glicentin (proglucagon).
A; Reference number: A94233; MUID:81248172; PMID:6894800
A; Accession: A01540
A; Molecule type: protein
A; Residues: 1-69 <TH1>
A;Cross-references: UNIPARC:UPI0000173500
R; Thim, L.; Moody, A.J.
Regul. Pept. Suppl. 2, S33, 1983
A; Title: Primary structure of a possible porcine proglucagon fragment.
A; Reference number: A60312
A; Accession: A60312
A; Molecule type: protein
A; Residues: 1-30 <TH2>
A; Cross-references: UNIPARC: UPI000002C9AC
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A; Note: this peptide is co-secreted with glucagon from the pancreas
R;Bromer, W.W.; Sinn, L.G.; Behrens, O.K.
J. Am. Chem. Soc. 79, 2807-2810, 1957
A; Title: The amino acid sequence of glucagon. V. Location of amide groups, acid degrad
A; Reference number: A91781
A; Accession: A91781
A; Molecule type: protein
A; Residues: 33-61 <BRO>
A; Cross-references: UNIPARC: UPI000002C586
R;Orskov, C.; Bersani, M.; Johnsen, A.H.; Hojrup, P.; Holst, J.J.
J. Biol. Chem. 264, 12826-12829, 1989
A; Title: Complete sequences of glucagon-like peptide-1 from human and pig small intest
A; Reference number: A92732; MUID: 89327238; PMID: 2753890
A; Accession: B32614
A; Molecule type: protein
A; Residues: 78-107 < ORS>
A;Cross-references: UNIPARC:UPI0000032E2A
R; Buhl, T.; Thim, L.; Kofod, H.; Orskov, C.; Harling, H.; Holst, J.J.
J. Biol. Chem. 263, 8621-8624, 1988
A; Title: Naturally occurring products of proglucagon 111-160 in the porcine and human
A; Reference, number: A28064; MUID: 88243712; PMID: 3379036
A; Accession: A28064
A; Molecule type: protein
A; Residues: 111-158 < BUH>
A; Cross-references: UNIPARC: UPI0000173501
C; Comment: X's represent missing amino acids, mostly basic, that are predicted to exis
C; Superfamily: glucagon
C; Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; inte
F;1-69/Product: glucagon-69 #status experimental <G69>
F;1-30/Region: glicentin-related peptide #status experimental
F;33-69/Product: glucagon-37 #status predicted <G37>
F;33-61/Product: glucagon #status experimental <GCN>
F;78-107/Product: glucagon-like peptide 1 #status experimental <GL1>
F;126-158/Product: glucagon-like peptide 2 #status experimental <GL2>
F;107/Modified site: amidated carboxyl end (Arg) (amide in mature form from following
  Query Match
                          78.0%; Score 32; DB 1; Length 158;
  Best Local Similarity
                          30.4%; Pred. No. 0.89;
             7; Conservative
                                  0; Mismatches 16; Indels
                                                                  0; Gaps
Qу
            1 HXXGXFTXDXXXXXXXXXXXXI 23
              1 1 11 1
                                    11
           78 HAEGTFTSDVSSYLEGQAAKEFI 100
RESULT 2
GCBO
glucagon precursor - bovine
N; Contains: glicentin-related peptide; glucagon; glucagon-like peptide 1; glucagon-lik
C; Species: Bos primigenius taurus (cattle)
C;Date: 14-Nov-1983 #sequence_revision 14-Nov-1983 #text_change 20-Mar-1998
C; Accession: A93970; A92081; A01538
R; Lopez, L.C.; Frazier, M.L.; Su, C.J.; Kumar, A.; Saunders, G.F.
Proc. Natl. Acad. Sci. U.S.A. 80, 5485-5489, 1983
A; Title: Mammalian pancreatic preproglucagon contains three glucagon-related peptides.
A; Reference number: A93970; MUID: 83299996; PMID: 6577439
A; Accession: A93970
A; Molecule type: mRNA
A; Residues: 1-180 <LOP>
A; Cross-references: UNIPARC: UPI00001734FF; EMBL: K00107
R; Bromer, W.W.; Boucher, M.E.; Koffenberger Jr., J.E.
```

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J. Biol. Chem. 246, 2822-2827, 1971
A; Title: Amino acid sequence of bovine glucagon.
A; Reference number: A92081; MUID: 71166445; PMID: 5102927
A; Accession: A92081
A; Molecule type: protein
A; Residues: 53-81 <BRO>
A; Cross-references: UNIPARC: UPI000002C586
C; Superfamily: glucagon
C; Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; panc
F;1-20/Domain: signal sequence #status predicted <SIG>
F;21-180/Product: proglucagon #status predicted <PGC>
F;21-50/Region: glicentin-related peptide #status predicted
F;53-81/Product: glucagon #status experimental <GCN>
F;98-127/Product: glucagon-like peptide 1 #status experimental <GL1>
F;146-178/Product: glucagon-like peptide 2 #status predicted <GL2>
F;127/Modified site: amidated carboxyl end (Arg) (amide in mature form from following
                          78.0%; Score 32; DB 1; Length 180;
 Query Match
                         30.4%; Pred. No. 1;
 Best Local Similarity
 Matches 7; Conservative
                                                                             0;
                                 0; Mismatches
                                                16; Indels
                                                                 0; Gaps
Qy
           1 HXXGXFTXDXXXXXXXXXXXXFI 23
             -11
Db
          98 HAEGTFTSDVSSYLEGQAAKEFI 120
RESULT 3
glucagon precursor - golden hamster
N; Contains: glicentin-related peptide; glucagon; glucagon-like peptide 1; glucagon-lik
C; Species: Mesocricetus auratus (golden hamster)
C;Date: 13-Jun-1983 #sequence revision 13-Jun-1983 #text change 20-Mar-1998
C; Accession: A01539
R;Bell, G.I.; Santerre, R.F.; Mullenbach, G.T.
Nature 302, 716-718, 1983
A; Title: Hamster preproglucagon contains the sequence of glucagon and two related pept
A; Reference number: A01539; MUID: 83167563; PMID: 6835407
A; Accession: A01539
A; Molecule type: mRNA
A; Residues: 1-180 <BEL>
A;Cross-references: UNIPARC:UPI00001734FE; EMBL:J00059
C; Superfamily: glucagon
C; Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; panc
F;1-20/Domain: signal sequence #status predicted <SIG>
F;21-180/Product: proglucagon #status predicted <PGC>
F;21-50/Region: glicentin-related peptide #status predicted
F;53-81/Product: glucagon #status predicted <GCN>
F;98-127/Product: glucagon-like peptide 1 #status predicted <GL1>
F;146-180/Product: glucagon-like peptide 2 #status predicted <GL2>
F;127/Modified site: amidated carboxyl end (Arg) (amide in mature form from following
  Query Match
                          78.0%; Score 32; DB 1; Length 180;
  Best Local Similarity
                         30.4%; Pred. No. 1;
                                 0; Mismatches
                                                16; Indels
                                                                 0; Gaps
 Matches
            7; Conservative
Qу
           1 HXXGXFTXDXXXXXXXXXXXFI 23
             1 | | | |
          98 HAEGTFTSDVSSYLEGQAAKEFI 120
Db
```

```
glucagon precursor - guinea pig
N; Alternate names: oxyntomodulin
N; Contains: glicentin-related peptide; glucagon; glucagon-37 (oxyntomodulin); glucagon
C; Species: Cavia porcellus (quinea pig)
C;Date: 30-Sep-1987 #sequence revision 31-Dec-1992 #text change 09-Jul-2004
C; Accession: A24856; A23849; A60323
R; Seino, S.; Welsh, M.; Bell, G.I.; Chan, S.J.; Steiner, D.F.
FEBS Lett. 203, 25-30, 1986
A; Title: Mutations in the quinea pig preproglucagon gene are restricted to a specific
A; Reference number: A24856; MUID: 86248118; PMID: 3755107
A; Accession: A24856
A; Molecule type: mRNA
A; Residues: 1-180 <SEI>
A; Cross-references: UNIPROT: P05110; UNIPARC: UPI000012B82C; DDBJ: D00014; GB: N00014; NID
R; Huang, C.G.; Eng, J.; Pan, Y.C.E.; Hulmes, J.D.; Yalow, R.S.
Diabetes 35, 508-512, 1986
A; Title: Guinea pig glucagon differs from other mammalian glucagons.
A; Reference number: A23849; MUID: 86165412; PMID: 3956884
A; Accession: A23849
A; Molecule type: protein
A; Residues: 53-81 < HUA>
A; Cross-references: UNIPARC: UPI00001734FD
R; Conlon, J.M.; Hansen, H.F.; Schwartz, T.W.
Regul. Pept. 11, 309-320, 1985
A; Title: Primary structure of glucagon and a partial sequence of oxyntomodulin (glucag
A; Reference number: A60323; MUID: 86017849; PMID: 4048553
A; Accession: A60323
A; Molecule type: protein
A; Residues: 53-81 <CON>
A; Cross-references: UNIPARC: UPI00001734FD
A; Note: glucagon-37 was not completely sequenced
C; Superfamily: glucagon
C; Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; panc
F;1-20/Domain: signal sequence #status predicted <SIG>
F;21-180/Product: proglucagon #status predicted <PGC>
F;21-50/Region: glicentin-related peptide #status predicted / '
F;53-89/Product: glucagon-37 (oxyntomodulin) #status experimental <G37>
F;53-81/Product: glucagon #status experimental <GCN>
F;98-127/Product: glucagon-like peptide 1 #status predicted <GL1>
F;146-178/Product: glucagon-like peptide 2 #status predicted <GL2>
F:127/Modified site: amidated carboxyl end (Arg) (amide in mature form from following
 Query Match
                          78.0%; Score 32; DB 1; Length 180;
  Best Local Similarity
                          30.4%; Pred. No. 1;
 Matches 7; Conservative 0; Mismatches
                                                                  0; Gaps
                                                 16; Indels
                                                                              0;
            1 HXXGXFTXDXXXXXXXXXXXXFI 23
Qу
              98 HAEGTFTSDVSSYLEGQAAKEFI 120
RESULT 5
glucagon precursor [validated] - human
N; Contains: glicentin; glicentin-related polypeptide (GRPP); glucagon; glucagon-like p
C; Species: Homo sapiens (man)
C; Date: 24-Apr-1984 #sequence revision 31-Mar-1993 #text change 09-Jul-2004
C; Accession: A24377; A44197; A30875; A32614; A01541; S23309
R; White, J.W.; Saunders, G.F.
Nucleic Acids Res. 14, 4719-4730, 1986
```

```
A; Title: Structure of the human glucagon gene.
A; Reference number: A24377; MUID:86259053; PMID:3725587
A; Accession: A24377
A; Molecule type: DNA
A; Residues: 1-180 <WHI>
A;Cross-references: UNIPROT:P01275; UNIPARC:UPI000012B832; GB:X03991
R; Bell, G.I.; Sanchez-Pescador, R.; Laybourn, P.J.; Najarian, R.C.
Nature 304, 368-371, 1983
A; Title: Exon duplication and divergence in the human preproglucagon gene.
A; Reference number: A44197; MUID: 83271477; PMID: 6877358
A; Accession: A44197
A; Molecule type: DNA
A; Residues: 1-179 <BEL>
A;Cross-references: UNIPARC:UPI000016A9A7; GB:V01515; NID:g31777; PIDN:CAA24759.1; PID
R; Drucker, D.J.; Asa, S.
J. Biol. Chem. 263, 13475-13478, 1988
A; Title: Glucagon gene expression in vertebrate brain.
A; Reference number: A30875; MUID: 88330860; PMID: 2901414
A; Accession: A30875
A; Molecule type: mRNA
A; Residues: 1-180 < DRU>
A; Cross-references: UNIPARC: UPI000012B832; GB: J04040; NID: q183269; PIDN: AAA52567.1; PI
R;Orskov, C.; Bersani, M.; Johnsen, A.H.; Hojrup, P.; Holst, J.J.
J. Biol. Chem. 264, 12826-12829, 1989
A; Title: Complete sequences of qlucagon-like peptide-1 from human and pig small intest
A; Reference number: A92732; MUID: 89327238; PMID: 2753890
A; Accession: A32614
A; Molecule type: protein
A; Residues: 98-127 < ORS>
A;Cross-references: UNIPARC:UPI0000032E2A
R; Thomsen, J.; Kristiansen, K.; Brunfeldt, K.; Sundby, F.
FEBS Lett. 21, 315-319, 1972
A; Title: The amino acid sequence of human glucagon.
A; Reference number: A91373
A; Accession: A01541
A; Molecule type: protein
A; Residues: 53-81 <THO>
A; Cross-references: UNIPARC: UPI000002C586
R;Tsugita, A.; Takamoto, K.; Kamo, M.; Iwadate, H.
Eur. J. Biochem. 206, 691-696, 1992
A; Title: C-terminal sequencing of protein. A novel partial acid hydrolysis and analysi
A; Reference number: S23188; MUID: 92298996; PMID: 1606956
A; Accession: S23309
A; Molecule type: protein
A; Residues: 53-81 <TSU>
A;Cross-references: UNIPARC:UPI000002C586
C; Comment: In pancreatic alpha-cells, proglucagon is processed to glicentin-related po
C; Genetics:
A; Gene: GDB: GCG
A;Cross-references: GDB:119265; OMIM:138030
A; Map position: 2q36-2q37
A; Introns: 31/2; 85/2; 131/2; 179/2
C; Superfamily: glucagon
C; Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; inte
F;1-20/Domain: signal sequence #status predicted <SIG>
F;21-180/Product: proglucagon #status experimental <PGC>
F;21-89/Product: glicentin #status experimental <GLN>
F;21-50/Product: glicentin-related polypeptide #status predicted <GRPP>
F;53-89/Product: oxyntomodulin #status experimental <OXN>
F;53-81/Product: glucagon #status experimental <GCN>
F;92-178/Product: major proglucagon fragment #status experimental <MPGF>
```

```
F;92-127/Product: glucagon-like peptide 1 #status experimental <GL1>
F;98-127/Product: truncated glucagon-like peptide 1 #status experimental <TGL>
F:146-178/Product: glucagon-like peptide 2 #status predicted <GL2>
F;127/Modified site: amidated carboxyl end (Arg) (amide in mature form from following
                          78.0%; Score 32; DB 1; Length 180;
  Query Match
  Best Local Similarity
                          30.4%; Pred. No. 1;
 Matches
            7; Conservative
                                 0; Mismatches 16; Indels
                                                                  0; Gaps
                                                                              0;
           1 HXXGXFTXDXXXXXXXXXXXXI 23
Qу
              1 1 1 1
                                   11
           98 HAEGTFTSDVSSYLEGQAAKEFI 120
RESULT 6
GCRT
glucagon precursor - rat
N; Contains: glicentin-related peptide; glucagon; glucagon-like peptide 1; glucagon-lik
C; Species: Rattus norvegicus (Norway rat)
C;Date: 30-Sep-1987 #sequence revision 30-Sep-1987 #text change 09-Jul-2004
C; Accession: A22655; A25190; A44198
R; Heinrich, G.; Gros, P.; Habener, J.F.
J. Biol. Chem. 259, 14082-14087, 1984
A; Title: Glucagon gene sequence: four of six exons encode separate functional domains
A; Reference number: A22655; MUID: 85054853; PMID: 6094539
A; Accession: A22655
A; Molecule type: DNA
A; Residues: 1-180 <HEI>
A; Cross-references: UNIPROT: P06883; UNIPARC: UPI000002DB13; EMBL: K02809
A; Note: the authors translated the codon TTG for residue 10 as Glu and ACC for residue
R; Mojsov, S.; Heinrich, G.; Wilson, I.B.; Ravazzola, M.; Orci, L.; Habener, J.F.
J. Biol. Chem. 261, 11880-11889, 1986
A;Title: Preproglucagon gene expression in pancreas and intestine diversifies at the 1
A; Reference number: A25190; MUID: 86304324; PMID: 3528148
A; Accession: A25190
A; Status: not compared with conceptual translation
A; Molecule type: mRNA
                                                                                       1.
A; Residues: 1-180 < MOJ>
A; Cross-references: UNIPARC: UPI000002DB13
R; Heinrich, G.; Gros, P.; Lund, P.K.; Bentley, R.C.; Habener, J.F.
Endocrinology 115, 2176-2181, 1984
A; Title: Pre-proglucagon messenger ribonucleic acid: nucleotide and encoded amino acid
A; Reference number: A44198; MUID: 85051023; PMID: 6548696
A; Accession: A44198
A; Status: preliminary
A; Molecule type: mRNA
A; Residues: 1-180 <HE2>
A;Cross-references: UNIPARC:UPI000002DB13; GB:K02809; GB:K02810; GB:K02811; GB:K02812
C; Genetics:
A; Introns: 31/2; 85/2; 131/2; 179/2
C; Superfamily: glucagon
C; Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; panc
F;1-20/Domain: signal sequence #status predicted <SIG>
F;21-180/Product: proglucagon #status predicted <PGC>
F;21-50/Region: glicentin-related peptide #status predicted
F;53-81/Product: glucagon #status predicted <GCN>
F;98-127/Product: glucagon-like peptide 1 #status predicted <GL1>
F;146-180/Product: glucagon-like peptide 2 #status predicted <GL2>
F;127/Modified site: amidated carboxyl end (Arg) (amide in mature form from following
  Query Match
                          78.0%; Score 32; DB 1; Length 180;
```

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Best Local Similarity 30.4%; Pred. No. 1;
  Matches 7; Conservative
                                 0; Mismatches 16; Indels
                                                                  0; Gaps
                                                                              0;
            1 HXXGXFTXDXXXXXXXXXXXXI 23
Qу
             -1 -1 \cdot 11 1
           98 HAEGTFTSDVSSYLEGOAAKEFI 120
RESULT 7
GCRTDU
glucagon precursor - degu
N; Contains: glicentin-related peptide; glucagon; glucagon-like peptide 1; glucagon-lik
C; Species: Octodon degus (degu)
C;Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text change 09-Jul-2004
C; Accession: C36118
R; Nishi, M.; Steiner, D.F.
Mol. Endocrinol. 4, 1192-1198, 1990
A; Title: Cloning of complementary DNAs encoding islet amyloid polypeptide, insulin, an
A; Reference number: A36118; MUID: 91155952; PMID: 2293024
A; Accession: C36118
A; Molecule type: mRNA
A; Residues: 1-180 <NIS>
A; Cross-references: UNIPROT: P22890; UNIPARC: UPI000012B839; GB: M57688; NID: q202467; PID
C; Superfamily: glucagon
C; Keywords: amidated carboxyl end; carbohydrate metabolism; duplication; hormone; panc
F;1-20/Domain: signal sequence #status predicted <SIG>
F;21-180/Product: proglucagon #status predicted <PGC>
F;21-50/Region: glicentin-related peptide #status predicted
F;53-81/Product: glucagon #status predicted <GCN>
F;98-127/Product: glucagon-like peptide 1 #status predicted <GL1>
F:146-178/Product: glucagon-like peptide 2 #status predicted <GL2>
F;127/Modified site: amidated carboxyl end (Arg) (amide in mature form from following
  Query Match
                          78.0%; Score 32; DB 1; Length 180;
  Best Local Similarity
                          30.4%; Pred. No. 1;
             7; Conservative
  Matches
                                 0; Mismatches
                                                  16; Indels
                                                                  0; Gaps
Qу
            1 HXXGXFTXDXXXXXXXXXXXXFI 23
              1 1 1 1
           98 HAEGTFTSDVSSYLEGQAAKEFI 120
RESULT 8
A57294
glucagon precursor - mouse
C; Species: Mus musculus (house mouse)
C;Date: 01-Dec-1995 #sequence_revision 01-Dec-1995 #text change 09-Jul-2004
C; Accession: A57294; S49903
R; Rothenberg, M.E.; Eilertson, C.D.; Klein, K.; Zhou, Y.; Lindberg, I.; McDonald, J.K.
J. Biol. Chem. 270, 10136-10146, 1995
A; Title: Processing of mouse proglucagon by recombinant prohormone convertase 1 and im
A; Reference number: A57294; MUID: 95247722; PMID: 7730317
A; Accession: A57294
A; Status: preliminary
A; Molecule type: mRNA
A; Residues: 1-180 < ROT>
A;Cross-references: UNIPROT:P55095; UNIPARC:UPI000000192D; EMBL:Z46845; NID:g599880; P
C; Superfamily: glucagon
C; Keywords: carbohydrate metabolism; duplication; hormone; pancreas
  Query Match
                          78.0%; Score 32; DB 2; Length 180;
```

```
Best Local Similarity
                          30.4%; Pred. No. 1;
             7; Conservative
                                 0; Mismatches
                                                   16;
                                                        Indels
                                                                      Gaps
                                                                              0;
Qу
            1 HXXGXFTXDXXXXXXXXXXXXI 23
              Db
           98 HAEGTFTSDVSSYLEGQAAKEFI 120
RESULT 9
GCFGB
glucagon precursor - bullfrog (fragments)
N; Alternate names: oxyntomodulin
N; Contains: glucagon; glucagon-36 (oxyntomodulin); glucagon-like peptide 1; glucagon-l
C: Species: Rana catesbeiana (bullfrog)
C;Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text change 20-Mar-1998
C; Accession: B28091; C28091; D28091
R; Pollock, H.G.; Hamilton, J.W.; Rouse, J.B.; Ebner, K.E.; Rawitch, A.B.
J. Biol. Chem. 263, 9746-9751, 1988
A; Title: Isolation of peptide hormones from the pancreas of the bullfrog (Rana catesbe
A; Reference number: A92730; MUID: 88257102; PMID: 3260236
A; Accession: B28091
A; Molecule type: protein
A; Residues: 1-36 < PO2>
A; Cross-references: UNIPARC: UPI0000173502
A; Accession: C28091
A; Molecule type: protein
A; Residues: 37-68 < POL>
A; Cross-references: UNIPARC: UPI0000173502
A; Accession: D28091
A; Molecule type: protein
A; Residues: 69-101 < PO3>
A; Cross-references: UNIPARC: UPI0000173502
C; Superfamily: glucagon
C; Keywords: carbohydrate metabolism; duplication; hormone; pancreas
F;1-36/Product: glucagon-36 (oxyntomodulin) #status experimental <G36>
F;1-29/Product: glucagon #status predicted <GCN>
F;37-67/Product: glucagon-like peptide 1 #status experimental <GL1>
F;69-101/Product: glucagon-like peptide 2 #status experimental <GL2>
  Query Match
                          75.6%; Score 31; DB 1; Length 101;
  Best Local Similarity
                          26.1%; Pred. No. 1;
            6; Conservative
                                 1; Mismatches
                                                  16;
                                                        Indels
                                                                  0;
                                                                      Gaps
                                                                              0;
Qу
            1 HXXGXFTXDXXXXXXXXXXXXI 23
              Db
           37 HADGTFTSDMSSYLEEKAAKEFV 59
RESULT 10
A61583
glucagon - ostrich
C; Species: Struthio camelus (ostrich)
C;Date: 28-Oct-1994 #sequence revision 06-Jan-1995 #text change 09-Jul-2004
C; Accession: A61583
R; Ferreira, A.; Litthauer, D.; Saayman, H.; Oelofsen, W.; Crabb, J.; Lazure, C.
Int. J. Pept. Protein Res. 38, 90-95, 1991
A; Title: Purification and primary structure of glucagon from ostrich pancreas splenic
A; Reference number: A61583; MUID: 92040567; PMID: 1938110
A; Accession: A61583
A; Molecule type: protein
A; Residues: 1-29 <FER>
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```
A; Cross-references: UNIPROT: P01276; UNIPARC: UPI000012B827
C; Superfamily: glucagon
C; Keywords: carbohydrate metabolism; duplication; hormone; pancreas
  Query Match
                          73.2%; Score 30; DB 1; Length 29;
  Best Local Similarity
                          55.6%; Pred. No. 0.53;
             5; Conservative
                                 0; Mismatches
                                                    4; Indels
                                                                  0:
                                                                      Gaps
                                                                               0;
            1 HXXGXFTXD 9
Qу
              1 1 1 1 1
Db
            1 HSQGTFTSD 9
RESULT 11
GCCB
glucagon - Chinchilla brevicaudata
C; Species: Chinchilla brevicaudata, Chinchilla lanigera brevicaudata
C;Date: 31-Mar-1993 #sequence revision 31-Mar-1993 #text change 09-Jul-2004
C; Accession: A60413
R; Eng, J.; Kleinman, W.A.; Chu, L.S.
Peptides 11, 683-685, 1990
A; Title: Purification of peptide hormones from chinchilla pancreas by chemical assay.
A; Reference number: A60413; MUID: 91045327; PMID: 2235678
A; Accession: A60413
A; Molecule type: protein
A; Residues: 1-29 <ENG>
A; Cross-references: UNIPROT: P31297; UNIPARC: UPI000012B82D
C; Superfamily: glucagon
C; Keywords: carbohydrate metabolism; duplication; hormone; pancreas
  Query Match
                          73.2%;
                                  Score 30; DB 1; Length 29;
  Best Local Similarity
                          55.6%;
                                  Pred. No. 0.53;
  Matches
             5; Conservative
                                 0; Mismatches 4; Indels
                                                                  0; Gaps
                                                                               0;
Qу
            1 HXXGXFTXD 9
              1 1 1 1
Db
            1 HSQGTFTSD 9
RESULT 12
glucagon - smaller spotted catshark
C; Species: Scyliorhinus canicula (smaller spotted catshark, smaller spotted dogfish)
C;Date: 31-Dec-1988 #sequence revision 31-Dec-1988 #text change 09-Jul-2004
C; Accession: A26992
R; Conlon, J.M.; O'Toole, L.; Thim, L.
FEBS Lett. 214, 50-56, 1987
A:Title: Primary structure of glucagon from the gut of the common dogfish (Scyliorhinu
A; Reference number: A26992; MUID: 87190953; PMID: 3569517
A; Accession: A26992
A; Molecule type: protein
A; Residues: 1-29 <CON>
A;Cross-references: UNIPROT:P09687; UNIPARC:UPI000017350C
C; Superfamily: glucagon
C; Keywords: carbohydrate metabolism; duplication; hormone; intestine; pancreas
  Query Match
                          73.2%; Score 30; DB 1; Length 29;
  Best Local Similarity
                          55.6%; Pred. No. 0.53;
             5; Conservative
                                 0; Mismatches
                                                    4; Indels
                                                                  0; Gaps
                                                                              0;
            1 HXXGXFTXD 9
Qy
```

```
1 HSEGTFTSD 9
Db
RESULT 13
GCDK
glucagon - duck
C; Species: Anas platyrhynchos (domestic duck)
C; Date: 13-Jul-1981 #sequence revision 13-Jul-1981 #text change 09-Jul-2004
C; Accession: A01542
R; Sundby, F.; Frandsen, E.K.; Thomsen, J.; Kristiansen, K.; Brunfeldt, K.
FEBS Lett. 26, 289-293, 1972
A; Title: Crystallization and amino acid sequence of duck glucagon.
A; Reference number: A91384; MUID: 73049475; PMID: 4636745
A; Accession: A01542
A; Molecule type: protein
A; Residues: 1-29 <SUN>
A; Cross-references: UNIPROT: P01276; UNIPARC: UPI000012B827
A; Experimental source: Pekin breed
C; Superfamily: glucagon
C; Keywords: carbohydrate metabolism; duplication; hormone; pancreas
  Query Match
                          73.2%; Score 30; DB 1; Length 29;
  Best Local Similarity
                          55.6%; Pred. No. 0.53;
  Matches
          5; Conservative
                                0; Mismatches
                                                   4; Indels
                                                                 0;
                                                                     Gaps ·
Qу
           1 HXXGXFTXD 9
             1 HSQGTFTSD 9
RESULT 14
GCOPV
glucagon - North American opossum
C; Species: Didelphis virginiana, Didelphis marsupialis virginiana (North American opos
C;Date: 31-Mar-1993 #sequence revision 31-Mar-1993 #text change 09-Jul-2004
C; Accession: JQ0364
R;Yu, J.H.; Eng, J.; Rattan, S.; Yalow, R.S.
Peptides 10, 1195-1197, 1989
A; Title: Opossum insulin, glucagon and pancreatic polypeptide: amino acid sequences.
A; Reference number: JQ0362; MUID: 90160042; PMID: 2695899
A; Accession: JQ0364
A; Molecule type: protein
A; Residues: 1-29 <YUJ>
A; Cross-references: UNIPROT: P18108; UNIPARC: UPI000012B830
C; Superfamily: glucagon
C; Keywords: carbohydrate metabolism; duplication; hormone; pancreas
  Query Match
                          73.2%; Score 30; DB 1; Length 29;
  Best Local Similarity
                          55.6%; Pred. No. 0.53;
 Matches
            5; Conservative
                                 0; Mismatches
                                                   4; Indels
                                                                 0;
                                                                     Gaps
                                                                              0;
Qу
            1 HXXGXFTXD 9
             1 1 1 1
Db
            1 HSQGTFT$D 9
RESULT 15
GCTTS
glucagon - slider turtle
C; Species: Pseudemys scripta (slider)
```

```
C;Date: 31-Mar-1993 #sequence revision 31-Mar-1993 #text_change 09-Jul-2004
C; Accession: B60414
R; Conlon, J.M.; Hicks, J.W.
Peptides 11, 461-466, 1990
A; Title: Isolation and structural characterization of insulin, glucagon and somatostat
A; Reference number: A60414; MUID: 90341082; PMID: 1974347
A; Accession: B60414
A; Molecule type: protein
A; Residues: 1-29 <CON>
A;Cross-references: UNIPROT:P01276; UNIPARC:UPI000012B827
C; Superfamily: glucagon
C; Keywords: carbohydrate metabolism; duplication; hormone; pancreas
                         73.2%; Score 30; DB 1; Length 29;
 Query Match
 Best Local Similarity 55.6%; Pred. No. 0.53;
 Matches 5; Conservative 0; Mismatches
                                                  4; Indels
                                                                 0; Gaps
                                                                             0;
           1 HXXGXFTXD 9
Qу
             1 HSQGTFTSD 9
Db
RESULT 16
A91740
glucagon - turkey (tentative sequence)
C; Species: Meleagris gallopavo (common turkey)
C;Date: 31-Dec-1991 #sequence revision 31-Dec-1991 #text change 20-Mar-1998
C; Accession: A91740; A01542
R; Markussen, J.; Frandsen, E.; Heding, L.G.; Sundby, F.
Horm. Metab. Res. 4, 360-363, 1972
A; Title: Turkey glucagon: crystallization, amino acid composition and immunology.
A; Reference number: A91740; MUID: 73074118; PMID: 4645932
A; Accession: A91740
A; Molecule type: protein
A; Residues: 1-29 <MAR>
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C; Keywords: carbohydrate metabolism; duplication; hormone; pancreas
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Qу
             Db
           1 HSQGTFTSD 9
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S07211
glucagon - marbled electric ray (tentative sequence)
C; Species: Torpedo marmorata (marbled electric ray)
C;Date: 12-Feb-1993 #sequence_revision 12-Feb-1993 #text_change 09-Jul-2004
C; Accession: S07211
R; Conlon, J.M.; Thim, L.
Gen. Comp. Endocrinol. 60, 398-405, 1985
A; Title: Primary structure of glucagon from an elasmobranchian fish Torpedo marmorata.
A; Reference number: S07211; MUID: 86083105; PMID: 4076759
A; Accession: S07211
A; Molecule type: protein
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A; Residues: 1-29 < CON>
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A; Note: the sequence from table 2 is inconsistent with that from Fig. 4 in lacking 8-S
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C; Keywords: duplication; hormone
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C39258
glucagon - common squirrel monkey
C; Species: Saimiri sciureus (common squirrel monkey)
C;Date: 03-May-1994 #sequence revision 03-May-1994 #text change 09-Jul-2004
C; Accession: C39258
R;Yu, J.H.; Eng, J.; Yalow, R.S.
Proc. Natl. Acad. Sci. U.S.A. 87, 9766-9768, 1990
A; Title: Isolation and amino acid sequences of squirrel monkey (Saimiri sciurea) insul
A; Reference number: A39258; MUID: 91088593; PMID: 2263627
A; Accession: C39258
A; Molecule type: protein
A; Residues: 1-29 < YUA>
A; Cross-references: UNIPROT: P25449; UNIPARC: UPI000002C586
A; Note: the amino acid sequence is described but not shown
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C; Keywords: carbohydrate metabolism; duplication; hormone; pancreas
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Db
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RESULT 19
A91742
glucagon - Arabian camel (tentative sequence)
C; Species: Camelus dromedarius (Arabian camel)
C;Date: 31-Dec-1991 #sequence revision 31-Dec-1991 #text change 09-Jul-2004
C; Accession: A91742; A01541
R; Sundby, F.; Markussen, J.; Danho, W.
Horm. Metab. Res. 6, 425, 1974
A; Title: Camel glucagon: isolation, crystallization and amino acid composition.
A; Reference number: A91742; MUID: 75027473; PMID: 4421675
A; Accession: A91742
A; Molecule type: protein
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A; Cross-references: UNIPROT: P25449; UNIPARC: UPI000002C586
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A; Note: electrophoresis indicated the presence of two minor glucagon components
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C; Keywords: carbohydrate metabolism; duplication; hormone; pancreas
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Db
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glucagon - rabbit (tentative sequence)
C; Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 31-Dec-1991 #sequence revision 31-Dec-1991 #text change 09-Jul-2004
C; Accession: A91741; A01541
R; Sundby, F.; Markussen, J.
Horm. Metab. Res. 4, 56, 1972
A; Title: Rabbit glucagon: isolation, crystallization and amino acid composition.
A; Reference number: A91741; MUID: 72129389; PMID: 5011077
A; Accession: A91741
A; Molecule type: protein
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Qу
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S44473
glucagon-like peptide - North American paddlefish (Polyodon spathula)
C; Species: Polyodon spathula
C;Date: 18-Sep-1997 #sequence revision 18-Sep-1997 #text_change 09-Jul-2004
C; Accession: S44473
R; Nguyen, T.M.; Mommsen, T.P.; Mims, S.M.; Conlon, J.M.
Biochem. J. 300, 339-345, 1994
A; Title: Characterization of insulins and proglucagon-derived peptides from a phylogen
A; Reference number: S44467; MUID: 94271144; PMID: 8002937
A; Accession: S44473
A; Molecule type: protein
A; Residues: 1-30 < NGU>
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C; Keywords: duplication; hormone; pancreas
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C; Species: Heloderma horridum (Mexican beaded lizard)
C; Date: 31-Mar-1993 #sequence revision 31-Mar-1993 #text change 09-Jul-2004
C; Accession: A23674
R; Eng, J.; Andrews, P.C.; Kleinman, W.A.; Singh, L.; Raufman, J.P.
J. Biol. Chem. 265, 20259-20262, 1990
A; Title: Purification and structure of exendin-3, a new pancreatic secretagogue isolat
A; Reference number: A23674; MUID: 91056067; PMID: 1700785
A; Accession: A23674
A; Molecule type: protein
A; Residues: 1-39 <ENG>
A; Cross-references: UNIPROT: P20394; UNIPARC: UPI0000032DE6
C; Comment: Exendins are venom components that are thought to bind to receptors for vas
C; Superfamily: glucagon
C; Keywords: amidated carboxyl end; duplication; secretagogue; venom
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Db
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qlucagon-69 - dog
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N; Contains: glicentin-related peptide; glucagon; glucagon-37 (oxyntomodulin)
C; Species: Canis lupus familiaris (dog)
C;Date: 31-Dec-1992 #sequence revision 31-Dec-1992 #text change 09-Jul-2004
C; Accession: A60318
R; Shinomura, Y.; Eng, J.; Yalow, R.S.
Regul. Pept. 23, 299-308, 1988
A; Title: Immunoreactive glucagons purified from dog pancreas, stomach and ileum.
A; Reference number: A60318; MUID: 89185675; PMID: 3238052
A; Accession: A60318
A; Molecule type: protein
A; Residues: 1-69 <SHI>
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A; Experimental source: ileum
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C; Keywords: carbohydrate metabolism; duplication; hormone; intestine; pancreas
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Qy
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33 HSQGTFTSD 41

Db

start | next page

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RESULT 24
GCFIS
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N; Contains: glucagon; glucagon-like peptide 1
C; Species: Myoxocephalus scorpius (shorthorn sculpin, daddy sculpin)
C;Date: 31-Mar-1993 #sequence revision 31-Mar-1993 #text change 09-Jul-2004
C; Accession: A27188
R; Conlon, J.M.; Falkmer, S.; Thim, L.
Eur. J. Biochem. 164, 117-122, 1987
A; Title: Primary structures of three fragments of proglucagon from the pancreatic isle
A; Reference number: A27188; MUID: 87161872; PMID: 3549298
A; Accession: A27188
A; Molecule type: protein
A; Residues: 1-27; 28-56; 57-87 < CON>
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C; Keywords: carbohydrate metabolism; duplication; hormone; pancreas
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              1 | | |
           57 HADGTFTSD 65
RESULT 25
GCAF
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SCORE Search Results Details for Application 09757788 and Search Result 20070122_145832_us-09-757-788a-1.rai.

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OM protein - protein search, using sw model

Run on:

January 23, 2007, 03:22:09; Search time 50 Seconds

(without alignments)

68.274 Million cell updates/sec

Title:

US-09-757-788A-1

Perfect score: 41

Sequence:

Scoring table: BLOSUM62

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Searched:

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Total number of hits satisfying chosen parameters:

650591

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database :

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result

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| 2 | 33 | 80.5 | 31 | 2 | US-09-209-799D-20 | Sequence 20, Appl |
| 3 | 33 | 80.5 | 31 | 2 | US-09-997-792A-17 | Sequence 17, Appl |
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| 97 | 32 | 78.0 | 30 | 2 | US-09-857-636A-72 | _ | 72, Appl |
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ALIGNMENTS

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; Sequence 15, Application US/09268578C
; Patent No. 6620910
; GENERAL INFORMATION:
; APPLICANT: ADIR ET COMPAGNIE
  TITLE OF INVENTION: NEW PEPTIDE COMPOUNDS ANALOGUES OF
  TITLE OF INVENTION: GLUCAGON-LIKE-PEPTIDE-1(7-37)
  FILE REFERENCE: adir300
  CURRENT APPLICATION NUMBER: US/09/268,578C
  CURRENT FILING DATE: 1999-03-15
  NUMBER OF SEQ ID NOS: 59
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 15
   LENGTH: 30
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; Sequence 20, Application US/09209799D
; Patent No. 6380357
; GENERAL INFORMATION:
  APPLICANT: Hermeling, Ronald
 APPLICANT: Hoffmann, James
; APPLICANT: Narasimhan, Chakravarthy
 TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 CRYSTALS
  FILE REFERENCE: X-10242
; CURRENT APPLICATION NUMBER: US/09/209,799D
  CURRENT FILING DATE: 1998-12-11
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   LENGTH: 31
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   ORGANISM: Artificial
   FEATURE:
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RESULT 3
US-09-997-792A-17
; Sequence 17, Application US/09997792A
; Patent No. 6555521
; GENERAL INFORMATION:
; APPLICANT: ELI LILLY and COMPANY
  TITLE OF INVENTION: Glucagon-Like Peptide-1 Crystals
  FILE REFERENCE: X-10242A
  CURRENT APPLICATION NUMBER: US/09/997,792A
; CURRENT FILING DATE: 2002-09-30
; PRIOR APPLICATION NUMBER: US 60/069,728
; PRIOR FILING DATE: 1997-12-16
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn version 3.1
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; SEQ ID NO 17
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   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Synthetic Construct
US-09-997-792A-17
                        80.5%; Score 33; DB 2; Length 31;
 Ouery Match
 Best Local Similarity 30.4%; Pred. No. 0.22;
           7; Conservative
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 Matches
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             1 HATGTFTSDVSSYLEGQAAKEFI 23
RESULT 4
US-09-268-578C-35
; Sequence 35, Application US/09268578C
; Patent No. 6620910
; GENERAL INFORMATION:
 APPLICANT: ADIR ET COMPAGNIE
  TITLE OF INVENTION: NEW PEPTIDE COMPOUNDS ANALOGUES OF
  TITLE OF INVENTION: GLUCAGON-LIKE-PEPTIDE-1(7-37)
  FILE REFERENCE: adir300
  CURRENT APPLICATION NUMBER: US/09/268,578C
  CURRENT FILING DATE: 1999-03-15
; NUMBER OF SEQ ID NOS: 59
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 35
   LENGTH: 31
   TYPE: PRT
   ORGANISM: Artificial Sequence
   OTHER INFORMATION: Description of Artificial Sequence: glucagon-like
   OTHER INFORMATION: peptides
US-09-268-578C-35
 Query Match
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 Best Local Similarity 30.4%; Pred. No. 0.22;
                             0; Mismatches 16; Indels 0; Gaps
 Matches 7; Conservative
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            1 HASGTFTSDVSSYLEGQAAKEFI 23
RESULT 5
US-08-472-349-7
; Sequence 7, Application US/08472349
; Patent No. 6284727
; GENERAL INFORMATION:
    APPLICANT: Kim, Yesook
    APPLICANT: Lambert, William J.
    APPLICANT: Qi, Hong
    APPLICANT: Gelfand, Robert A.
    APPLICANT: Geoghegan, Kieran F.
    APPLICANT: Danley, Dennis E.
    TITLE OF INVENTION: Prolonged Delivery of Peptides
    NUMBER OF SEQUENCES: 7
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CORRESPONDENCE ADDRESS:
      ADDRESSEE: Pfizer Inc
      STREET: 235 East 42nd Street, 20th Floor
      CITY: New York
      STATE: New York
      COUNTRY: U.S.A.
      ZIP: 10017-5755
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/472,349
      FILING DATE:
      CLASSIFICATION: 514
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US/08/181,655
      FILING DATE:
    ATTORNEY/AGENT INFORMATION:
      NAME: Sheyka, Robert F.
      REGISTRATION NUMBER: 31,304
      REFERENCE/DOCKET NUMBER: PC8391
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (212)573-1189
      TELEFAX: (212) 573-1939
      TELEX: N/A
  INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 27 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
    HYPOTHETICAL: NO
    ANTI-SENSE: NO
    FRAGMENT TYPE: N-terminal
    ORIGINAL SOURCE:
      ORGANISM: N/A
      STRAIN: N/A
      INDIVIDUAL ISOLATE: N/A
      HAPLOTYPE: N/A
      CELL LINE: N/A
    IMMEDIATE SOURCE:
    LIBRARY: N/A
      CLONE: N/A
    POSITION IN GENOME:
      CHROMOSOME/SEGMENT: N/A
      MAP POSITION: N/A
US-08-472-349-7
 Query Match
                        78.0%; Score 32; DB 2; Length 27;
 Best Local Similarity
                        30.4%; Pred. No. 0.34;
                                                              0; Gaps
                                                                          0;
 Matches 7; Conservative
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                                              16; Indels
           1 HXXGXFTXDXXXXXXXXXXXXI 23
Qу
            1 HAEGTFTSDVSSYLEGQAAKEFI 23
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RESULT 6

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SEQUENCE DESCRIPTION: SEQ ID NO: 7:
US-09-943-084-7
 Query Match
                         78.0%; Score 32; DB 2; Length 27;
 Best Local Similarity 30.4%; Pred. No. 0.34;
 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps
          1 HXXGXFTXDXXXXXXXXXXXXFI 23
Qу
            Db
           1 HAEGTFTSDVSSYLEGQAAKEFI 23
RESULT 7
US-08-095-162-4
; Sequence 4, Application US/08095162
; Patent No. 5512459
  GENERAL INFORMATION:
    APPLICANT: Wagner, Fred W.
    APPLICANT: Stout, Jay
    APPLICANT: Henriksen, Dennis
    APPLICANT: Partridge, Bruce
    APPLICANT: Manning, Shane
    TITLE OF INVENTION: Enzymatic Method for Modification of TITLE OF INVENTION: Recombinant Polypeptides
    NUMBER OF SEQUENCES: 26
    CORRESPONDENCE ADDRESS:
     ADDRESSEE: Merchant & Gould
      STREET: 3100 No. 5512459west Center
      CITY: Minneapolis
      STATE: MN
      COUNTRY: USA
      ZIP: 55402
    COMPUTER READABLE FORM:
     MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
     SOFTWARE: PatentIn Release #1.0, Version #1.25
   CURRENT APPLICATION DATA:
    APPLICATION NUMBER: US/08/095,162
     FILING DATE: 20-JUL-1993
     CLASSIFICATION: 514
   ATTORNEY/AGENT INFORMATION:
     NAME: Nelson, Albin J.
     REGISTRATION NUMBER: 28,659
     REFERENCE/DOCKET NUMBER: 8648.32-US01
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 612-332-5300
      TELEFAX: 612-332-9081
  INFORMATION FOR SEQ ID NO: 4:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 28 amino acids
      TYPE: amino acid
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
    IMMEDIATE SOURCE:
      CLONE: GLP1 (7-34)
US-08-095-162-4
  Query Match 78.0%; Score 32; DB 1; Length 28; Best Local Similarity 30.4%; Pred. No. 0.36;
  Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps
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1 HXXGXFTXDXXXXXXXXXXXXII 23
            1 | | |
           1 HAEGTFTSDVSSYLEGQAAKEFI 23
RESULT 8
US-08-470-220A-4
; Sequence 4, Application US/08470220A
; Patent No. 5707826
 GENERAL INFORMATION:
    APPLICANT: Wagner, Fred W. APPLICANT: Stout, Jay
    APPLICANT: Henriksen, Dennis
    APPLICANT: Partridge, Bruce
    APPLICANT: Manning, Shane
    TITLE OF INVENTION: Enzymatic Method for Modification of
    TITLE OF INVENTION: Recombinant Polypeptides
    NUMBER OF SEQUENCES: 26
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Merchant & Gould
      STREET: 3100 No. 5707826west Center
      CITY: Minneapolis
      STATE: MN
      COUNTRY: USA
      ZIP: 55402
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/470,220A
      FILING DATE: 06-JUN-1995
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/095,162
      FILING DATE: 20-JUL-1993
    ATTORNEY/AGENT INFORMATION:
    NAME: Nelson, Albin J.
      REGISTRATION NUMBER: 28,659
      REFERENCE/DOCKET NUMBER: 8648.32-US01
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 612-332-5300
      TELEFAX: 612-332-9081
  INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 28 amino acids
      TYPE: amino acid
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
    IMMEDIATE SOURCE:
      CLONE: GLP1 (7-34)
US-08-470-220A-4
                         78.0%; Score 32; DB 1; Length 28;
 Query Match
 Best Local Similarity 30.4%; Pred. No. 0.36;
 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps
           1 HXXGXFTXDXXXXXXXXXXXII 23
Qу
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1 HAEGTFTSDVSSYLEGQAAKEFI 23

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RESULT 9
US-08-967-374-4
; Sequence 4, Application US/08967374
; Patent No. 6037143
; GENERAL INFORMATION:
    APPLICANT: Wagner, Fred W.
   APPLICANT: Stout, Jay
    APPLICANT: Henriksen, Dennis
   APPLICANT: Mentition, Dennis
APPLICANT: Partridge, Bruce
APPLICANT: Manning, Shane
TITLE OF INVENTION: Enzymatic Method for Modification of
TITLE OF INVENTION: Recombinant Polypeptides
  NUMBER OF SEQUENCES: 26
  CORRESPONDENCE ADDRESS:
    ADDRESSEE: Merchant & Gould STREET: 3100 No. 6037143west Center
     CITY: Minneapolis
    STATE: MN
COUNTRY: USA
       ZIP: 55402
    COMPUTER READABLE FORM:
     MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/967,374
       FILING DATE:
      CLASSIFICATION:
   PRIOR APPLICATION DATA:
     APPLICATION NUMBER: 08/520,485
     FILING DATE: 29-AUG-1995
    ATTORNEY/AGENT INFORMATION:
     NAME: Carter, Charles G.
       REGISTRATION NUMBER: 35,093
    REFERENCE/DOCKET NUMBER: 8648.32-USD1
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 612-332-5300
       TELEFAX: 612-332-9081
   INFORMATION FOR SEQ ID NO: 4:
    SEQUENCE CHARACTERISTICS:
       LENGTH: 28 amino acids
       TYPE: amino acid
      TOPOLOGY: linear
     MOLECULE TYPE: peptide
     IMMEDIATE SOURCE:
      CLONE: GLP1 (7-34)
US-08-967-374-4
                           78.0%; Score 32; DB 2; Length 28;
  Query Match
  Best Local Similarity 30.4%; Pred. No. 0.36;
  Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps
            1 HXXGXFTXDXXXXXXXXXXXXI 23
              1 111
            1 HAEGTFTSDVSSYLEGQAAKEFI 23
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US-09-943-084-7
; Sequence 7, Application US/09943084
; Patent No. 6828303
   GENERAL INFORMATION:
        APPLICANT: Kim, Yesook
                   Lambert, William J.
                   Qi, Hong
                   Gelfand, Robert A.
                   Geoghegan, Kieran F.
                   Danley, Dennis E.
        TITLE OF INVENTION: Prolonged Delivery of Peptides
        NUMBER OF SEQUENCES: 7
        CORRESPONDENCE ADDRESS:
             ADDRESSEE: Pfizer Inc
             STREET: 235 East 42nd Street, 20th Floor
             CITY: New York
             STATE: New York
             COUNTRY: U.S.A.
             ZIP: 10017-5755
        COMPUTER READABLE FORM:
             MEDIUM TYPE: Floppy disk
             COMPUTER: IBM PC compatible
             OPERATING SYSTEM: PC-DOS/MS-DOS
             SOFTWARE: PatentIn Release #1.0, Version #1.25
        CURRENT APPLICATION DATA:
             APPLICATION NUMBER: US/09/943,084
             FILING DATE: 31-Aug-2001
             CLASSIFICATION: 514
        PRIOR APPLICATION DATA:
             APPLICATION NUMBER: US/08/181,655
             FILING DATE: <Unknown>
        ATTORNEY/AGENT INFORMATION:
             NAME: Sheyka, Robert F.
             REGISTRATION NUMBER: 31,304
             REFERENCE/DOCKET NUMBER: PC8391
        TELECOMMUNICATION INFORMATION:
             TELEPHONE: (212)573-1189
             TELEFAX: (212)573-1939
             TELEX: N/A
    INFORMATION FOR SEQ ID NO: 7:
        SEQUENCE CHARACTERISTICS:
             LENGTH: 27 amino acids
             TYPE: amino acid
             STRANDEDNESS: single
             TOPOLOGY: linear
        MOLECULE TYPE: peptide
        HYPOTHETICAL: NO
        ANTI-SENSE: NO
        FRAGMENT TYPE: N-terminal
        ORIGINAL SOURCE:
             ORGANISM: N/A
             STRAIN: N/A
             INDIVIDUAL ISOLATE: N/A
             HAPLOTYPE: N/A
             CELL LINE: N/A
        IMMEDIATE SOURCE:
             LIBRARY: N/A
             CLONE: N/A
        POSITION IN GENOME:
             CHROMOSOME/SEGMENT: N/A
             MAP POSITION: N/A
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RESULT 10
US-08-915-918A-3
; Sequence 3, Application US/08915918A
; Patent No. 6277819
  GENERAL INFORMATION:
    APPLICANT: Efendic, Suad
    TITLE OF INVENTION: USE OF GLP-1 OR ANALOGS IN TREATMENT OF
    TITLE OF INVENTION: MYOCARDIAL INFARCTION
    NUMBER OF SEQUENCES: 6
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: BRINKS, HOFER, GILSON & LIONE
      STREET: NBC Tower - Suite 3600, 455 N. Cityfront
      STREET: Plaza Drive
      CITY: Chicago
      STATE: Illinois
      COUNTRY: USA
      ZIP: 60611-5599
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/915,918A
      FILING DATE: 21-AUG-1997
      CLASSIFICATION: 514
    ATTORNEY/AGENT INFORMATION:
     NAME: Martin, Alice O.
      REGISTRATION NUMBER: 35,601
      REFERENCE/DOCKET NUMBER: 8792/28
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 312-321-4200
      TELEFAX: 312-321-4299
  INFORMATION FOR SEQ ID NO: 3:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 28 amino acids
      TYPE: amino acid
      STRANDEDNESS:
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-915-918A-3
 Query Match
                         78.0%; Score 32; DB 2; Length 28;
 Best Local Similarity 30.4%; Pred. No. 0.36;
           7; Conservative
                                                16; Indels 0; Gaps
                               0; Mismatches
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             1 HAEGTFTSDVSSYLEGQAAKEFI 23
RESULT 11
US-08-472-349-5
; Sequence 5, Application US/08472349
; Patent No. 6284727
  GENERAL INFORMATION: .
    APPLICANT: Kim, Yesook
    APPLICANT: Lambert, William J.
    APPLICANT: Qi, Hong APPLICANT: Gelfand, Robert A.
    APPLICANT: Geoghegan, Kieran F.
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APPLICANT: Danley, Dennis E.
    TITLE OF INVENTION: Prolonged Delivery of Peptides
    NUMBER OF SEQUENCES: 7
    CORRESPONDENCE ADDRESS:
     ADDRESSEE: Pfizer Inc
      STREET: 235 East 42nd Street, 20th Floor
      CITY: New York
      STATE: New York
      COUNTRY: U.S.A.
      ZIP: 10017-5755
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
     OPERATING SYSTEM: PC-DOS/MS-DOS
     SOFTWARE: PatentIn Release #1.0, Version #1.25
   CURRENT APPLICATION DATA:
    APPLICATION NUMBER: US/08/472,349
     FILING DATE:
     CLASSIFICATION: 514
  PRIOR APPLICATION DATA:
     APPLICATION NUMBER: US/08/181,655
     FILING DATE:
    ATTORNEY/AGENT INFORMATION:
     NAME: Sheyka, Robert F.
      REGISTRATION NUMBER: 31,304
     REFERENCE/DOCKET NUMBER: PC8391
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (212)573-1189
      TELEFAX: (212) 573-1939
      TELEX: N/A
  INFORMATION FOR SEQ ID NO: 5:
    SEOUENCE CHARACTERISTICS:
     LENGTH: 28 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
     TOPOLOGY: linear
   MOLECULE TYPE: peptide
   HYPOTHETICAL: NO
   ANTI-SENSE: NO
   FRAGMENT TYPE: N-terminal
   ORIGINAL SOURCE:
    ORGANISM: N/A
     STRAIN: N/A
     INDIVIDUAL ISOLATE: N/A
     HAPLOTYPE: N/A
     CELL LINE: N/A
   IMMEDIATE SOURCE:
     LIBRARY: N/A
      CLONE: N/A
    POSITION IN GENOME:
      CHROMOSOME/SEGMENT: N/A
      MAP POSITION: N/A
US-08-472-349-5
                        78.0%; Score 32; DB 2; Length 28;
 Query Match
 Best Local Similarity 30.4%; Pred. No. 0.36;
 Matches 7; Conservative
                            0; Mismatches 16; Indels 0; Gaps
           1 HXXGXFTXDXXXXXXXXXXXII 23
            1 HAEGTFTSDVSSYLEGQAAKEFI 23
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RESULT 12
US-09-209-799D-8
; Sequence 8, Application US/09209799D
; Patent No. 6380357
; GENERAL INFORMATION:
  APPLICANT: Hermeling, Ronald
  APPLICANT: Hoffmann, James
  APPLICANT: Narasimhan, Chakravarthy
  TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 CRYSTALS
  FILE REFERENCE: X-10242
; CURRENT APPLICATION NUMBER: US/09/209,799D .
; CURRENT FILING DATE: 1998-12-11
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 8
   LENGTH: 28
   TYPE: PRT
   ORGANISM: Artificial
   FEATURE:
   OTHER INFORMATION: synthetic construct
US-09-209-799D-8
  Query Match
                         78.0%; Score 32; DB 2; Length 28;
  Best Local Similarity 30.4%; Pred. No. 0.36;
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 Matches 7; Conservative 0; Mismatches 16; Indels
                                                                            0;
Qу
           1 HXXGXFTXDXXXXXXXXXXXXFI 23
             1 HAEGTFTSDVSSYLEGOAAKEFI 23
RESULT 13
US-09-505-991-4
; Sequence 4, Application US/09505991
; Patent No. 6403361
   GENERAL INFORMATION:
        APPLICANT: Wagner, Fred W.
                   Stout, Jay
                   Henriksen, Dennis
                   Partridge, Bruce
                   Manning, Shane
        TITLE OF INVENTION: Enzymatic Method for Modification of
                            Recombinant Polypeptides
        NUMBER OF SEQUENCES: 26
        CORRESPONDENCE ADDRESS:
             ADDRESSEE: Merchant & Gould
             STREET: 3100 No. 6403361west Center
             CITY: Minneapolis
             STATE: MN
             COUNTRY: USA
             ZIP: 55402
        COMPUTER READABLE FORM:
             MEDIUM TYPE: Floppy disk
             COMPUTER: IBM PC compatible
             OPERATING SYSTEM: PC-DOS/MS-DOS
             SOFTWARE: PatentIn Release #1.0, Version #1.30
        CURRENT APPLICATION DATA:
             APPLICATION NUMBER: US/09/505,991
             FILING DATE: 17-Feb-2000
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CLASSIFICATION: <Unknown>
        PRIOR APPLICATION DATA:
             APPLICATION NUMBER: 08/520,485
             FILING DATE: <Unknown>
        ATTORNEY/AGENT INFORMATION:
             NAME: Carter, Charles G.
             REGISTRATION NUMBER: 35,093
             REFERENCE/DOCKET NUMBER: 8648.32-USD1
        TELECOMMUNICATION INFORMATION:
             TELEPHONE: 612-332-5300
             TELEFAX: 612-332-9081
    INFORMATION FOR SEQ ID NO: 4:
        SEQUENCE CHARACTERISTICS:
             LENGTH: 28 amino acids
             TYPE: amino acid
             TOPOLOGY: linear
        MOLECULE TYPE: peptide.
        IMMEDIATE SOURCE:
             CLONE: GLP1 (7-34)
        SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-505-991-4
  Query Match
                        78.0%; Score 32; DB 2; Length 28;
  Best Local Similarity 30.4%; Pred. No. 0.36;
 Matches 7; Conservative 0; Mismatches 16; Indels
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                                                              0; Gaps
           1 HXXGXFTXDXXXXXXXXXXXXI 23
Qу
            1 HAEGTFTSDVSSYLEGQAAKEFI 23
RESULT 14
US-09-212-663-5
; Sequence 5, Application US/09212663
; Patent No. 6461834
; GENERAL INFORMATION:
; APPLICANT: DORMADY, Dan
; APPLICANT: STOUT, Jay S.
; APPLICANT: STRYDOM, Daniel J.
; APPLICANT: HOLMQUIST, Barton
; APPLICANT: WAGNER, Fred W.
; TITLE OF INVENTION: ENZYMATIC AMIDATION OF PEPTIDES
; FILE REFERENCE: 089187/0162
  CURRENT APPLICATION NUMBER: US/09/212,663
  CURRENT FILING DATE: 1998-12-16
; PRIOR APPLICATION NUMBER: US 60/107,311
; PRIOR FILING DATE: 1998-11-06
; NUMBER OF SEQ ID NOS: 25
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
   LENGTH: 28
   TYPE: PRT
   ORGANISM: Escherichia coli
US-09-212-663-5
                         78.0%; Score 32; DB 2; Length 28;
  Query Match
  Best Local Similarity 30.4%; Pred. No. 0.36;
            7; Conservative
                             0; Mismatches 16; Indels 0; Gaps
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Db
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RESULT 15
US-09-997-792A-6
; Sequence 6, Application US/09997792A
; Patent No. 6555521
; GENERAL INFORMATION:
; APPLICANT: ELI LILLY and COMPANY
  TITLE OF INVENTION: Glucagon-Like Peptide-1 Crystals
   FILE REFERENCE: X-10242A
   CURRENT APPLICATION NUMBER: US/09/997,792A
   CURRENT FILING DATE: 2002-09-30
   PRIOR APPLICATION NUMBER: US 60/069,728
; PRIOR FILING DATE: 1997-12-16
 ; NUMBER OF SEQ ID NOS: 25
  SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 6
   LENGTH: 28
    TYPE: PRT
    ORGANISM: Artificial Sequence
    FEATURE:
    OTHER INFORMATION: Synthetic Construct
US-09-997-792A-6
  Query Match
                          78.0%; Score 32; DB 2; Length 28;
  Best Local Similarity 30.4%; Pred. No. 0.36;
  Matches 7; Conservative
                                0; Mismatches 16; Indels
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            1 HXXGXFTXDXXXXXXXXXXXXI 23
Qу
              1 | 1 | 1
Db
            1 HAEGTFTSDVSSYLEGQAAKEFI 23
RESULT 16
US-10-170-301-2
; Sequence 2, Application US/10170301
; Patent No. 6573237
; GENERAL INFORMATION:
 ; APPLICANT: Rinella, Joseph
 ; TITLE OF INVENTION: Protein Formulations
 ; FILE REFERENCE: X12473A
.; CURRENT APPLICATION NUMBER: US/10/170,301
; CURRENT FILING DATE: 2002-06-12
 ; NUMBER OF SEQ ID NOS: 3
   SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
    LENGTH: 28
    TYPE: PRT
    ORGANISM: Homo sapiens
    FEATURE:
    NAME/KEY: MISC FEATURE
    LOCATION: (28)..(28)
    OTHER INFORMATION: Xaa = Lys or Lys-Gly
US-10-170-301-2
  Query Match
                          78.0%; Score 32; DB 2; Length 28;
  Best Local Similarity 30.4%; Pred. No. 0.36;
                                 0; Mismatches 16; Indels 0; Gaps
  Matches 7; Conservative
Qу
            1 HXXGXFTXDXXXXXXXXXXXII 23
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RESULT 17
US-09-943-084-5
; Sequence 5, Application US/09943084
; Patent No. 6828303
   GENERAL INFORMATION:
        APPLICANT: Kim, Yesook
                    Lambert, William J.
                    Qi, Hong
                    Gelfand, Robert A.
                    Geoghegan, Kieran F.
                    Danley, Dennis E.
         TITLE OF INVENTION: Prolonged Delivery of Peptides
        NUMBER OF SEQUENCES: 7
         CORRESPONDENCE ADDRESS:
              ADDRESSEE: Pfizer Inc
              STREET: 235 East 42nd Street, 20th Floor
              CITY: New York
             STATE: New York
              COUNTRY: U.S.A.
              ZIP: 10017-5755
         COMPUTER READABLE FORM:
              MEDIUM TYPE: Floppy disk
              COMPUTER: IBM PC compatible
              OPERATING SYSTEM: PC-DOS/MS-DOS
              SOFTWARE: PatentIn Release #1.0, Version #1.25
         CURRENT APPLICATION DATA:
              APPLICATION NUMBER: US/09/943,084
              FILING DATE: 31-Aug-2001
              CLASSIFICATION: 514
         PRIOR APPLICATION DATA:
              APPLICATION NUMBER: US/08/181,655
              FILING DATE: <Unknown>
         ATTORNEY/AGENT INFORMATION:
              NAME: Sheyka, Robert F.
              REGISTRATION NUMBER: 31,304
              REFERENCE/DOCKET NUMBER: PC8391
         TELECOMMUNICATION INFORMATION:
              TELEPHONE: (212)573-1189
              TELEFAX: (212)573-1939
              TELEX: N/A
    INFORMATION FOR SEQ ID NO: 5:
         SEQUENCE CHARACTERISTICS:
              LENGTH: 28 amino acids
              TYPE: amino acid
              STRANDEDNESS: single
              TOPOLOGY: linear
         MOLECULE TYPE: peptide
         HYPOTHETICAL: NO
         ANTI-SENSE: NO
         FRAGMENT TYPE: N-terminal
         ORIGINAL SOURCE:
              ORGANISM: N/A
              STRAIN: N/A
              INDIVIDUAL ISOLATE: N/A
              HAPLOTYPE: N/A
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LIBRARY: N/A
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             CHROMOSOME/SEGMENT: N/A
             MAP POSITION: N/A
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Qу
            . [ ] [ ] [
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PCT-US95-15800-21
; Sequence 21, Application PC/TUS9515800
   GENERAL INFORMATION:
    APPLICANT: BioNebraska, Inc.
    TITLE OF INVENTION: PRODUCTION OF PEPTIDES USING
    TITLE OF INVENTION: RECOMBINANT FUSION PROTEIN CONSTRICTS
    NUMBER OF SEQUENCES: 33
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Merchant & Gould
      STREET: 3100 Norwest Center, 90 S. 7th Street
      CITY: Minneapolis
      STATE: MN
      COUNTRY: U.S.A.
      ZIP: 55402
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Diskette
      COMPUTER: IBM Compatible
      OPERATING SYSTEM: DOS
      SOFTWARE: FastSEQ Version 1.5
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: PCT/US95/15800
      FILING DATE: 07-DEC-1995
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start | next page

SCORE 1.3 BuildDate: 11/17/2006

SCORE Search Results Details for Application 09757788 and Search Result 20070122_145835_us-09-757-788a-1.rapbm.

Score Home Page

Retrieve Application

List

SCORE System Overview

SCORE

FAQ

Comments / Suggestions

This page gives you Search Results detail for the Application 09757788 and Search Result 20070122_145835_us-09-757-788a-1.rapbm.

start | next page

Go Back to previous page

GenCore version 5.1.9 Copyright (c) 1993 - 2007 Biocceleration Ltd.

OM protein - protein search, using sw model

Run on:

January 23, 2007, 03:22:49; Search time 183 Seconds

(without alignments)

98.718 Million cell updates/sec

Title:

US-09-757-788A-1

Perfect score: 41

Sequence:

Scoring table: BLOSUM62

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Total number of hits satisfying chosen parameters:

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Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database : Published Applications AA Main:*

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6: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US11_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result

Query

Score Match Length DB ID

Description

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| 4 | 33 | 80.5 | 30 | 4 | US-10-761-717-7 | Sequence 7, Appli |
| 5 | 33 | 80.5 | 30 | 4 | US-10-761-717-12 | Sequence 12, Appl |
| 6 | 33 | 80.5 | 31 | 3 | US-09-209-799D-20 | Sequence 20, Appl |
| 7 | 33 | 80.5 | 31 | 3 | US-09-997 - 792-20 | Sequence 20, Appl |
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| 72 | 32 | 78.0 | 30 | 4 | US-10-201-288-28 | Sequence | 28, Appl |
| 73 | 32 | 78.0 | 30 | 4 | US-10-276-772-27 | Sequence | 27, Appl |
| 74 | 32 | 78.0 | 30 | 4 | US-10-276-772-28 | Sequence | 28, Appl |
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| 85 | 32 | 78.0 | 30 | 4 | US-10-629-261-32 | Sequence | 32, Appl |
| 86 | 32 | 78.0 | 30 | 4 | US-10-629-261-71 | Sequence | 71, Appl |
| 87 | 32 | 78.0 | 30 | 4 | US-10-629-261-72 | Sequence | 72, Appl |
| 88 | 32 | 78.0 | 30 | 4 | US-10-393-524A-18 | Sequence | 18, Appl |
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ALIGNMENTS

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; Sequence 9, Application US/11031851
; Publication No. US20060014685A1
; GENERAL INFORMATION:
  APPLICANT: PERI, KRISHNA
  APPLICANT: ABRAN, DANIEL
  APPLICANT:
              HABI, ABDELRKIM
  TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 ANALOGS WITH
  TITLE OF INVENTION: LONG DURATION OF ACTION
  FILE REFERENCE: GOUD:056US
  CURRENT APPLICATION NUMBER: US/11/031,851
  CURRENT FILING DATE: 2005-01-07
  NUMBER OF SEQ ID NOS: 23
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 9
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   OTHER INFORMATION: Peptide
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; Sequence 3, Application US/11031851
; Publication No. US20060014685A1
; GENERAL INFORMATION:
; APPLICANT: PERI, KRISHNA
; APPLICANT: ABRAN, DANIEL
; APPLICANT: HABI, ABDELRKIM
; TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 ANALOGS WITH
; TITLE OF INVENTION: LONG DURATION OF ACTION
; FILE REFERENCE: GOUD:056US
; CURRENT APPLICATION NUMBER: US/11/031,851
; CURRENT FILING DATE: 2005-01-07
  NUMBER OF SEQ ID NOS: 23
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
   LENGTH: 29
   TYPE: PRT
   ORGANISM: Artificial Sequence
   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
   OTHER INFORMATION: Peptide
   FEATURE:
   NAME/KEY: MOD RES
   LOCATION: (29)
   OTHER INFORMATION: Aib
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; Publication No. US20060014685A1
; GENERAL INFORMATION:
; APPLICANT: PERI, KRISHNA
; APPLICANT: ABRAN, DANIEL
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; APPLICANT: HABI, ABDELRKIM
; TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 ANALOGS WITH
; TITLE OF INVENTION: LONG DURATION OF ACTION
; FILE REFERENCE: GOUD:056US
; CURRENT APPLICATION NUMBER: US/11/031,851
; CURRENT FILING DATE: 2005-01-07
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   TYPE: PRT
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   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
   OTHER INFORMATION: Peptide
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 Best Local Similarity 30.4%; Pred. No. 0.76;
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; Sequence 7, Application US/10761717
; Publication No. US20040146985A1
; GENERAL INFORMATION:
; APPLICANT: Shanghai Hua-Yi Bio-Tech Lab
; APPLICANT: Sun, Yukun
  APPLICANT: Wu, Dengxi
  APPLICANT: Wu, Aizhen APPLICANT: Zhu, Zhiyong
; APPLICANT: Yu, Gang
; APPLICANT: Zhou, Jiaxiang
; APPLICANT: Zhao, Shaoling
  TITLE OF INVENTION: A Method of Producing Insulinotropic GLP-1 (7-36) Polypeptide
  TITLE OF INVENTION: and/or GLP-1 Analogs
; FILE REFERENCE: 291-0002US
; CURRENT APPLICATION NUMBER: US/10/761,717
  CURRENT FILING DATE: 2004-01-20
; PRIOR APPLICATION NUMBER: CN01126278.8
  PRIOR FILING DATE: 2001-07-19
  PRIOR APPLICATION NUMBER: PCT/CN02/00502
  PRIOR FILING DATE: 2002-07-17
; NUMBER OF SEQ ID NOS: 31
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 7
   LENGTH: 30
   TYPE: PRT
   ORGANISM: artificial
   FEATURE:
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   OTHER INFORMATION: relative to the wild-type sequence.
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  Query Match
  Best Local Similarity 30.4%; Pred. No. 0.78;
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7; Conservative
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  Matches
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; Sequence 12, Application US/10761717
; Publication No. US20040146985A1
; GENERAL INFORMATION:
; APPLICANT: Shanghai Hua-Yi Bio-Tech Lab
; APPLICANT: Sun, Yukun
; APPLICANT: Wu, Dengxi
  APPLICANT: Wu, Aizhen
  APPLICANT: Zhu, Zhiyong
  APPLICANT: Yu, Gang
  APPLICANT: Zhou, Jiaxiang
   APPLICANT: Zhao, Shaoling
   TITLE OF INVENTION: A Method of Producing Insulinotropic GLP-1 (7-36) Polypeptide
   TITLE OF INVENTION: and/or GLP-1 Analogs
   FILE REFERENCE: 291-0002US
   CURRENT APPLICATION NUMBER: US/10/761,717
  CURRENT FILING DATE: 2004-01-20
; PRIOR APPLICATION NUMBER: CN01126278.8
; PRIOR FILING DATE: 2001-07-19
; PRIOR APPLICATION NUMBER: PCT/CN02/00502
  PRIOR FILING DATE: 2002-07-17
  NUMBER OF SEQ ID NOS: 31
  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 12
    LENGTH: 30
    TYPE: PRT
    ORGANISM: artificial
    FEATURE:
    OTHER INFORMATION: This sequence contains one or more substituted amino acids
    OTHER INFORMATION: relative to the wild-type sequence.
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; Sequence 20, Application US/09209799D
; Publication No. US20010014666A1
; GENERAL INFORMATION:
; APPLICANT: Hermeling, Ronald
; APPLICANT: Hoffmann, James
  APPLICANT: Narasimhan, Chakravarthy
  TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 CRYSTALS
  FILE REFERENCE: X-10242
  CURRENT APPLICATION NUMBER: US/09/209,799D
; CURRENT FILING DATE: 1998-12-11
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NUMBER OF SEQ ID NOS: 29
  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 20
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   TYPE: PRT
   ORGANISM: Artificial
   FEATURE:
   OTHER INFORMATION: synthetic construct
US-09-209-799D-20
  Query Match
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             Db
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; Sequence 20, Application US/09997792
; Publication No. US20030045464A1
; GENERAL INFORMATION:
; APPLICANT: Hermeling, Ronald
; APPLICANT: Hoffmann, James
  APPLICANT: Narasimhan, Chakravarthy
  TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 CRYSTALS
  FILE REFERENCE: X-10242
  CURRENT APPLICATION NUMBER: US/09/997,792
  CURRENT FILING DATE: 2001-11-30
  NUMBER OF SEQ ID NOS: 29
  SOFTWARE: PatentIn version 3.0
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   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: synthetic construct
US-09-997-792-20
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US-09-943-084-7
; Sequence 7, Application US/09943084
; Publication No. US20030050237A1
   GENERAL INFORMATION:
        APPLICANT: Kim, Yesook
                   Lambert, William J.
                   Qi, Hong
                   Gelfand, Robert A.
;
                   Geoghegan, Kieran F.
                   Danley, Dennis E.
```

```
TITLE OF INVENTION: Prolonged Delivery of Peptides
        NUMBER OF SEQUENCES: 7
        CORRESPONDENCE ADDRESS:
             ADDRESSEE: Pfizer Inc
             STREET: 235 East 42nd Street, 20th Floor
             CITY: New York
             STATE: New York
             COUNTRY: U.S.A.
             ZIP: 10017-5755
        COMPUTER READABLE FORM:
             MEDIUM TYPE: Floppy disk
             COMPUTER: IBM PC compatible
             OPERATING SYSTEM: PC-DOS/MS-DOS
             SOFTWARE: PatentIn Release #1.0, Version #1.25
        CURRENT APPLICATION DATA:
             APPLICATION NUMBER: US/09/943,084
             FILING DATE: 31-Aug-2001
             CLASSIFICATION: 514
        PRIOR APPLICATION DATA:
             APPLICATION NUMBER: US/08/181,655
             FILING DATE: <Unknown>
        ATTORNEY/AGENT INFORMATION:
             NAME: Sheyka, Robert F.
             REGISTRATION NUMBER: 31,304
             REFERENCE/DOCKET NUMBER: PC8391
        TELECOMMUNICATION INFORMATION:
             TELEPHONE: (212)573-1189
             TELEFAX: (212)573-1939
             TELEX: N/A
   INFORMATION FOR SEQ ID NO: 7:
        SEQUENCE CHARACTERISTICS:
             LENGTH: 27 amino acids
             TYPE: amino acid
             STRANDEDNESS: single
             TOPOLOGY: linear
       MOLECULE TYPE: peptide
        HYPOTHETICAL: NO
        ANTI-SENSE: NO
        FRAGMENT TYPE: N-terminal
        ORIGINAL SOURCE:
             ORGANISM: N/A
             STRAIN: N/A
             INDIVIDUAL ISOLATE: N/A
             HAPLOTYPE: N/A
             CELL LINE: N/A
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             CLONE: N/A
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RESULT 9
US-10-847-220-32
; Sequence 32, Application US/10847220
; Publication No. US20050049177A1
; GENERAL INFORMATION:
; APPLICANT: Bachovchin, William W.
 APPLICANT: Lai, Hung-sen
  APPLICANT: Sanford, David George
  TITLE OF INVENTION: STABLE ANALOGS OF PEPTIDE AND
  TITLE OF INVENTION: POLYPEPTIDE THERAPEUTICS
  FILE REFERENCE: TUU-P01-011
  CURRENT APPLICATION NUMBER: US/10/847,220
  CURRENT FILING DATE: 2004-05-17
  PRIOR APPLICATION NUMBER: US 60/471,411
; PRIOR FILING DATE: 2003-05-15
; NUMBER OF SEQ ID NOS: 36
  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 32
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   ORGANISM: Homo sapiens
US-10-847-220-32
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 Matches 7; Conservative 0; Mismatches 16; Indels 0; Gaps
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Qу
            1 HAEGTFTSDVSSYLEGQAAKEFI 23
RESULT 10
US-09-767-981-1
; Sequence 1, Application US/09767981
; Publication No. US20010006943A1
; GENERAL INFORMATION:
; APPLICANT: Ejvind, Jensen
; APPLICANT: Jorgensen, Klavs Holger
; TITLE OF INVENTION: Protracted GLP-1 Compositions
; FILE REFERENCE: 4343.214-US
; CURRENT APPLICATION NUMBER: US/09/767,981
  CURRENT FILING DATE: 2001-01-23
  PRIOR APPLICATION NUMBER: US 08/860,103
  PRIOR FILING DATE: 1997-06-17
  PRIOR APPLICATION NUMBER: Danish Application PA 1478/94
  PRIOR FILING DATE: 1994-12-23
  PRIOR APPLICATION NUMBER: PCT/DK99/00263
  PRIOR FILING DATE: 1995-12-21
; NUMBER OF SEQ ID NOS: 1
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; SEQ ID NO 1
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US-09-767-981-1
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US-09-209-799D-8
; Sequence 8, Application US/09209799D
; Publication No. US20010014666A1
; GENERAL INFORMATION:
; APPLICANT: Hermeling, Ronald
 APPLICANT: Hoffmann, James
  APPLICANT: Narasimhan, Chakravarthy
  TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 CRYSTALS
  FILE REFERENCE: X-10242
; CURRENT APPLICATION NUMBER: US/09/209,799D
; CURRENT FILING DATE: 1998-12-11
; NUMBER OF SEQ ID NOS: 29
  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 8
   LENGTH: 28
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   ORGANISM: Artificial
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   OTHER INFORMATION: synthetic construct
US-09-209-799D-8
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Qу
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RESULT 12
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; Sequence 2, Application US/09772607
; Publication No. US20010016643A1
; GENERAL INFORMATION:
; APPLICANT: Jonassen, Ib
 APPLICANT: Havelund, Svend
  APPLICANT: Hansen, Per Hertz
  APPLICANT: Kurtzhals, Peter
  APPLICANT: Halstrom, John B.
  TITLE OF INVENTION: Peptide Derivatives
  FILE REFERENCE: 4409.214-US
  CURRENT APPLICATION NUMBER: US/09/772,607
  CURRENT FILING DATE: 2001-01-30
  PRIOR APPLICATION NUMBER: US 09/068,822
  PRIOR FILING DATE: 1998-05-14
  PRIOR APPLICATION NUMBER: PCT/DK96/00106
  PRIOR FILING DATE: 1996-03-18
  PRIOR APPLICATION NUMBER: DK 275/95
  PRIOR FILING DATE: 1995-03-18
 NUMBER OF SEQ ID NOS: 9
 SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 2
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LENGTH: 28
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RESULT 13
US-09-858-880-3
; Sequence 3, Application US/09858880
; Publication No. US20020061838A1
; GENERAL INFORMATION:
; APPLICANT: Holmquist, Barton
; APPLICANT: Dormady, Daniel
; TITLE OF INVENTION: Peptide Pharmaceutical Formulations
; FILE REFERENCE: 1627.020US1
; CURRENT APPLICATION NUMBER: US/09/858,880
; CURRENT FILING DATE: 2001-05-17
  PRIOR APPLICATION NUMBER: US 60/205,377
  PRIOR FILING DATE: 2000-05-17
; PRIOR APPLICATION NUMBER: US 60/205,262
; PRIOR FILING DATE: 2000-05-19
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 3
   LENGTH: 28
    TYPE: PRT
    ORGANISM: Artificial Sequence
: FEATURE:
    OTHER INFORMATION: A GLP-1 derivative
US-09-858-880-3
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  Best Local Similarity 30.4%; Pred. No. 1.3;
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             7; Conservative
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Qу
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; Sequence 8, Application US/09997792
; Publication No. US20030045464A1
; GENERAL INFORMATION:
; APPLICANT: Hermeling, Ronald
; APPLICANT: Hoffmann, James
; APPLICANT: Narasimhan, Chakravarthy
; TITLE OF INVENTION: GLUCAGON-LIKE PEPTIDE-1 CRYSTALS
; FILE REFERENCE: X-10242
; CURRENT APPLICATION NUMBER: US/09/997,792
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CURRENT FILING DATE: 2001-11-30
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 8
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    OTHER INFORMATION: synthetic construct
.US-09-997-792-8
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  Matches 7; Conservative 0; Mismatches 16; Indels
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             1 HAEGTFTSDVSSYLEGQAAKEFI 23
RESULT 15
US-09-943-084-5
; Sequence 5, Application US/09943084
; Publication No. US20030050237A1
    GENERAL INFORMATION:
         APPLICANT: Kim, Yesook
                    Lambert, William J.
                    Qi, Hong ·
                    Gelfand, Robert A.
                    Geoghegan, Kieran F.
                    Danley, Dennis E.
         TITLE OF INVENTION: Prolonged Delivery of Peptides
         NUMBER OF SEQUENCES: 7
         CORRESPONDENCE ADDRESS:
              ADDRESSEE: Pfizer Inc
              STREET: 235 East 42nd Street, 20th Floor
              CITY: New York
            STATE: New York
              COUNTRY: U.S.A.
              ZIP: 10017-5755
         COMPUTER READABLE FORM:
              MEDIUM TYPE: Floppy disk
              COMPUTER: IBM PC compatible
              OPERATING SYSTEM: PC-DOS/MS-DOS
              SOFTWARE: PatentIn Release #1.0, Version #1.25
         CURRENT APPLICATION DATA:
              APPLICATION NUMBER: US/09/943,084
              FILING DATE: 31-Aug-2001
              CLASSIFICATION: 514
         PRIOR APPLICATION DATA:
             APPLICATION NUMBER: US/08/181,655
              FILING DATE: <Unknown>
         ATTORNEY/AGENT INFORMATION:
              NAME: Sheyka, Robert F.
              REGISTRATION NUMBER: 31,304
              REFERENCE/DOCKET NUMBER: PC8391
         TELECOMMUNICATION INFORMATION:
              TELEPHONE: (212)573-1189
              TELEFAX: (212) 573-1939
              TELEX: N/A
    INFORMATION FOR SEQ ID NO: 5:
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SEQUENCE CHARACTERISTICS:
             LENGTH: 28 amino acids
             TYPE: amino acid
             STRANDEDNESS: single
             TOPOLOGY: linear
        MOLECULE TYPE: peptide
        HYPOTHETICAL: NO
        ANTI-SENSE: NO
        FRAGMENT TYPE: N-terminal
        ORIGINAL SOURCE:
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             STRAIN: N/A
             INDIVIDUAL ISOLATE: N/A
             HAPLOTYPE: N/A
             CELL LINE: N/A
        IMMEDIATE SOURCE:
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             CLONE: N/A
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             CHROMOSOME/SEGMENT: N/A
             MAP POSITION: N/A
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RESULT 16
US-10-169-657-3
; Sequence 3, Application US/10169657
; Publication No. US20030060412A1
; GENERAL INFORMATION:
; APPLICANT: Eli Lilly and Company
  TITLE OF INVENTION: Process for Solubilizing Glucagon-Like Peptide 1 Compounds
  FILE REFERENCE: X-11708
  CURRENT APPLICATION NUMBER: US/10/169,657
  CURRENT FILING DATE: 2002-06-28
  PRIOR APPLICATION NUMBER: US 60/178,438
  PRIOR FILING DATE: 2000-01-27
  PRIOR APPLICATION NUMBER: US 60/224,058
  PRIOR FILING DATE: 2000-08-09
  NUMBER OF SEQ ID NOS: 36
  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3
   LENGTH: 28
   TYPE: PRT
   ORGANISM: Artificial Sequence
    FEATURE:
   OTHER INFORMATION: synthetic construct
    FEATURE:
   NAME/KEY: VARIANT
   LOCATION: (28)..(28)
   OTHER INFORMATION: X at position 28 is Lys-COOH and Lys-Gly-COOH
US-10-169-657-3
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78.0%; Score 32; DB 4; Length 28;
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Qу
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          1 HAEGTFTSDVSSYLEGQAAKEFI 23
RESULT 17
US-10-169-657-6
; Sequence 6, Application US/10169657
; Publication No. US20030060412A1
; GENERAL INFORMATION:
  APPLICANT: Eli Lilly and Company
  TITLE OF INVENTION: Process for Solubilizing Glucagon-Like Peptide 1 Compounds
  FILE REFERENCE: X-11708
  CURRENT APPLICATION NUMBER: US/10/169,657
  CURRENT FILING DATE: 2002-06-28
  PRIOR APPLICATION NUMBER: US 60/178,438
; PRIOR FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/224,058
; PRIOR FILING DATE: 2000-08-09
; NUMBER OF SEQ ID NOS: 36
  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 6
   LENGTH: 28
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: synthetic construct
   FEATURE:
   NAME/KEY: VARIANT
   LOCATION: (1)..(28)
   OTHER INFORMATION: The last 3 amino acids of GLP-1 (7-37) are deleted
US-10-169-657-6
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; Sequence 2, Application US/10170301
; Publication No. US20030069182A1
; GENERAL INFORMATION:
  APPLICANT: Rinella, Joseph
  TITLE OF INVENTION: Protein Formulations
  FILE REFERENCE: X12473A
; CURRENT APPLICATION NUMBER: US/10/170,301
; CURRENT FILING DATE: 2002-06-12
; NUMBER OF SEQ ID NOS: 3
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
   LENGTH: 28
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   NAME/KEY: MISC FEATURE
   LOCATION: (28)..(28)
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US-10-170-301-2
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RESULT 19
US-10-378-094-7
; Sequence 7, Application US/10378094
; Publication No. US20030221201A1
; GENERAL INFORMATION:
; APPLICANT: PRIOR, Christopher P.
; APPLICANT: LAI, Char-Huei
; APPLICANT: SADEGHI, Homayoun
; APPLICANT: TURNER, Andrew
  TITLE OF INVENTION: MODIFIED TRANSFERRIN FUSION PROTEINS
  FILE REFERENCE: 54710-5001-01-US
  CURRENT APPLICATION NUMBER: US/10/378,094
  CURRENT FILING DATE: 2003-03-04
  PRIOR APPLICATION NUMBER: US 10/231,494
  PRIOR FILING DATE: 2002-08-30
  PRIOR APPLICATION NUMBER: US 60/334,059
  PRIOR FILING DATE: 2001-11-30
; PRIOR APPLICATION NUMBER: US 60/315,745
; PRIOR FILING DATE: 2001-08-30
; NUMBER OF SEQ ID NOS: 66
  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 7
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   TYPE: PRT
   ORGANISM: Artificial sequence
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   OTHER INFORMATION: GLP-1 molecule having insulinotropic activity
US-10-378-094-7
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RESULT 20
US-10-215-272-23
; Sequence 23, Application US/10215272
; Publication No. US20040002468A1
; GENERAL INFORMATION:
; APPLICANT: Genzyme Corporation
; APPLICANT: Wadsworth, Samuel C.
```

```
; APPLICANT: Armentano, Donna
; APPLICANT: Gregory, Richard J.
; APPLICANT: Parsons, Geoffrey
 TITLE OF INVENTION: Methods of Treating Diabetes and Other
  TITLE OF INVENTION: Blood Sugar Disorders
 FILE REFERENCE: 2478.2019002 PCT
; CURRENT APPLICATION NUMBER: US/10/215,272
; CURRENT FILING DATE: 2002-08-07
  PRIOR APPLICATION NUMBER: US 60/310,982
; PRIOR FILING DATE: 2001-08-08
  NUMBER OF SEQ ID NOS: 54
  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 23
   LENGTH: 28
   TYPE: PRT
   ORGANISM: Artificial Sequence
   OTHER INFORMATION: Modified GLP-1 molecule; GLP-1 (7-34)
US-10-215-272-23
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 Matches 7; Conservative 0; Mismatches
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            - 11
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RESULT 21
US-10-393-524A-23
; Sequence 23, Application US/10393524A
; Publication No. US20040052862A1
; GENERAL INFORMATION:
 APPLICANT: HENRIKSEN, DENNIS BANG
  APPLICANT: HOLST, JENS JUUL
  TITLE OF INVENTION: USE OF GLP FOR THE TREATMENT, PREVENTION, DIAGNOSIS, AND
  TITLE OF INVENTION: PROGNOSIS OF BONE-RELATED AND NUTRITION-RELATED DISORDERS
  FILE REFERENCE: 57736-CIP(46865)
 CURRENT APPLICATION NUMBER: US/10/393,524A
; CURRENT FILING DATE: 2003-03-20
; PRIOR APPLICATION NUMBER: 09/954,304
 PRIOR FILING DATE: 2001-09-17
 PRIOR APPLICATION NUMBER: GB 0022844.5
  PRIOR FILING DATE: 2000-12-07
  PRIOR APPLICATION NUMBER: GB 0029920.6
 PRIOR FILING DATE: 2000-12-07
  PRIOR APPLICATION NUMBER: 60/371,307
  PRIOR FILING DATE: 2002-04-10
  NUMBER OF SEQ ID NOS: 29
  SOFTWARE: PatentIn Ver. 2.1
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   LENGTH: 28
   TYPE: PRT
   ORGANISM: Artificial Sequence
   OTHER INFORMATION: Description of Artificial Sequence: Synthetic modified
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; Publication No. US20040143104A1
; GENERAL INFORMATION:
  APPLICANT: Genzyme Corporation
  APPLICANT: Wadsworth, Samuel
  APPLICANT: Armentano, Donna
  APPLICANT: Gregory, Richard J.
  APPLICANT: Parsons, Geoffrey
  TITLE OF INVENTION: Methods of Treating Diabetes and Other Blood Sugar Disorders
 FILE REFERENCE: 5062CIP
; CURRENT APPLICATION NUMBER: US/10/716,326
; CURRENT FILING DATE: 2003-11-17
; PRIOR APPLICATION NUMBER: US 10/215,272
  PRIOR FILING DATE: 2002-08-07
  PRIOR APPLICATION NUMBER: US 60/310,982
  PRIOR FILING DATE: 2001-08-08
  NUMBER OF SEQ ID NOS: 54
  SOFTWARE: PatentIn version 3.2
 SEQ ID NO 23
   LENGTH: 28
   TYPE: PRT
   ORGANISM: Artificial Sequence
  FEATURE:
   OTHER INFORMATION: Modified GLP-1 molecule; GLP-1 (7-34)
US-10-716-326-23
                         78.0%; Score 32; DB 4; Length 28;
 Query Match
 Best Local Similarity
                         30.4%; Pred. No. 1.3;
                             0; Mismatches
                                                16; Indels
           7; Conservative
                                                                   Gaps
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start | next page

SCORE 1.3 BuildDate: 11/17/2006

SCORE Search Results Details for Application 09757788 and Search Result 20070122_145838_us-09-757-788a-1.rapbn.

Score Home Page

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SCORE FAQ

Comments / Suggestions

This page gives you Search Results detail for the Application 09757788 and Search Result 20070122_145838_us-09-757-788a-1.rapbn.

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OM protein - protein search, using sw model

Run on:

January 23, 2007, 03:23:44; Search time 53 Seconds

(without alignments)

85.178 Million cell updates/sec

Title:

US-09-757-788A-1

Perfect score: 41

Sequence:

Scoring table: BLOSUM62

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Searched:

472558 seqs, 115754422 residues

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database :

Published_Applications_AA_New:*

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2: /EMC Celerra SIDS3/ptodata/2/pubpaa/US06 NEW PUB.pep:*

3: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US07_NEW_PUB.pep:*

4: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US08_NEW_PUB.pep:*

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8: /EMC Celerra SIDS3/ptodata/2/pubpaa/US60 NEW PUB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

કૃ

| Result | Score | Query | Length | DB | ID | Description |
|----------|----------|--------------|----------|--------|--|--|
| | | | | | | |
| 1 | 33 | 80.5 | 29 | 7 | US-11-055-093-235 | Sequence 235, App |
| 2 | 33 | 80.5 | 29 | 7 | US-11-206-903-235 | Sequence 235, App |
| 3 | 33 | 80.5 | 30 | 6 | US-10-559-595-221 | Sequence 221, App |
| 4 | 33 | 80.5 | 31 | 6 | US-10-559-595-214 | Sequence 214, App Sequence 176, App |
| ,5 6 | 33 | 80.5 80.5 | 31 | 7 7 | US-11-055-093-176 US-11-055-093-177 | Sequence 177, App |
| 6 7 | 33 33 | 80.5 | 31 | 7 | US-11-055-093-177 | Sequence 204, App |
| 8 | 33 | 80.5 | 31 | 7 | US-11-206-903-176 | Sequence 176, App |
| 9 | 33 | 80.5 | 31 | 7 | US-11-206-903-177 | Sequence 177, App |
| 10 | 33 | 80.5 | 31 | 7 | US-11-206-903-204 | Sequence 204, App |
| 11 | 33 | 80.5 | 37 | 7 | US-11-055-093-59 | Sequence 59, Appl |
| 12 | 33 | 80.5 | 37 | 7 | US-11-206-903-59 | Sequence 59, Appl |
| 13 | 32 | 78.0 | 28 | 7 | US-11-367-692-7 | Sequence 7, Appli |
| 14 | 32 | 78.0 | 29 | 6 | US-10-530-125-1 | Sequence 1, Appli |
| 15 | 32 | 78.0 | 29 | 7 | US-11-367-692-8 | Sequence 8, Appli |
| 16 | 32 | 78.0 | 30 | | US-10-559-595-217 | Sequence 217, App |
| 17 | 32 | 78.0 | 30 | 6 | US-10-559-595-218 | Sequence 218, App |
| 18 | 32 | 78.0 | 30 | 6 | US-10-559-595-219 | Sequence 219, App |
| 19 | 32 | 78.0 | 30 | 6 | US-10-559-595-220 | Sequence 220, App |
| 20 | 32 | 78.0 | 30 | 6 | US-10-559-595-226 | Sequence 226, App |
| 21 | 32 | 78.0 | 30 | 6 | US-10-559-595-231 | Sequence 231, App Sequence 7, Appli |
| 22 | 32 | 78.0 | . 30 | 6 6 | US-10-541-526-7 US-10-530-125-2 | Sequence 2, Appli |
| 23 24 | 32 32 | 78.0 78.0 | 30 30 | 6 | US-10-530-125-3 | Sequence 3, Appli |
| 25 | 32 | 78.0 | 30 | 6 | US-10-530-125-19 | Sequence 19, Appl |
| 26 | 32 | 78.0 | 30 | 6 | US-10-530-125-20 | Sequence 20, Appl |
| 27 | 32 | 78.0 | 30 | 6 | US-10-546-303-389 | Sequence 389, App |
| 28 | 32 | 78.0 | . 30 | 6 | US-10-546-303-390 | Sequence 390, App |
| 29 | 32 | 78.0 | 30 | 6 | US-10-546-303-391 | Sequence 391, App |
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| 32 | 32 | 78.0 | 30 | 6 | US-10-546-303-394 | Sequence 394, App |
| 33 | 32 | 78.0 | 30 | 6 | US-10 - 546-303-396 | Sequence 396, App |
| 34 | 32 | 78.0 | 30 | 6 | US-10-546-303-398 | Sequence 398, App |
| 35 | 32 | 78.0 | | 6 | US-10-546-303-400 | Sequence 400, App |
| 36 | 32 | 78.0 | | 6 | US-10-546-303-401 | Sequence 401, App |
| 37 | 32 | 78.0 | | 6 | US-10-546-303-407 | Sequence 407, App |
| 38 | 32 | 78.0 | | 6 | US-10-546-303-408 | Sequence 408, App Sequence 409, App |
| 39 | 32 | 78.0 78.0 | | 6 | US-10-546-303-409 US-10-546-303-410 | Sequence 410, App |
| 40 | 32 32 | 78.0 | | 6 6 | US-10-546-303-411 | Sequence 411, App |
| 41 42 | 32 | 78.0 | | 6 | US-10-546-303-412 | Sequence 412, App |
| 43 | 32 | 78.0 | | 6 | US-10-546-303-416 | Sequence 416, App |
| 44 | 32 | 78.0 | | 6 | US-10-546-303-417 | Sequence 417, App |
| 45 | 32 | 78.0 | | 6 | US-10-546-303-418 | Sequence 418, App |
| 46 | 32 | 78.0 | | 6 | US-10-546-303-420 | Sequence 420, App |
| 47 | 32 | 78.0 | | 6 | US-10-546-303-423 | Sequence 423, App |
| 48 | . 32 | 78.0 | 30 | 6 | US-10-546-303-424 | Sequence 424, App |
| 49 | 32 | 78.0 | 30 | | US-10-546-303-430 | Sequence 430, App |
| 50 | 32 | 78.0 | | | US-10-546-303-431 | Sequence 431, App |
| 51 | 32 | 78.0 | | | US-10-546-303-432 | Sequence 432, App |
| 52 | 32 | 78.0 | | | US-10-546-303-433 | Sequence 433, App |
| 53 | 32 | 78.0 | | | US-10-546-303-434 | Sequence 434, App |
| 54 | 32 | 78.0 | | | US-10-546-303-439 | Sequence 439, App |
| 55 | 32 | 78.0 | | | US-10-546-303-440 | Sequence 440, App Sequence 441, App |
| 56 57 | 32 32 | 78.0 78.0 | | | US-10-546-303-441 US-10-546-303-442 | Sequence 441, App |
| 57 58 | 32 | 78.0 | | | US-10-546-303-443 | Sequence 443, App |
| 50 | 52 | , 5.0 | 50 | 0 | 35 10 3.0 303 113 | |

| 59 | 32 | 78.0 | 30 | 6 | US-10-546-303-444. | Sequence | 444, | App |
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| 60 | 32 | 78.0 | 30 | 6 | US-10-546-303-447 | Sequence | 447, | App |
| 61 | 32 | 78.0 | 30 | 6 | US-10-546-303-461 | Sequence | 461, | App |
| 62 | 32 | 78.0 | 30 | 6 | US-10-546-303-462 | Sequence | 462, | App |
| 63 | 32 | 78.0 | 30 | 6 | US-10-546-303-463 | Sequence | 463, | App |
| 64 | . 32 | 78.0 | 30 | 6 | US-10-546-303-464 | Sequence | 464, | App |
| 65 | 32 | 78.0 | 30 | 6 | US-10-546-303-465 | Sequence | 465, | App |
| 66 | 32 | 78.0 | 30 | 6 | US-10-546-303-466 | Sequence | 466, | App |
| 67 | 32 | 78.0 | 30 | 6 | US-10-546-303-467 | Sequence | 467, | App |
| 68 | 32 | 78.0 | 30 | 6 | US-10-546-303-468 | Sequence | 468, | App |
| 69 | 32 | 78.0 | 30 | 6 | US-10-546-303-469 | Sequence | 469, | App |
| 70 | 32 | 78.0 | 30 | 6 | US-10-546-303-470 | Sequence | 470, | App |
| 71 | 32 | 78.0 | 30 | 6 | US-10-546-303-478 | Sequence | 478, | App |
| 72 - | 32 | 78.0 | 30 | 6 | US-10-546-303-479 | Sequence | 479, | App |
| 73 | 32 | 78.0 | 30 | 6 | US-10-546-303-480 | Sequence | 480, | App |
| 74 | 32 | 78.0 | 30 | 6 | US-10-546-303-481 | Sequence | 481, | App |
| 75 | 32 | 78.0 | 30 | 6 | US-10-546-303-482 | Sequence | 482, | App |
| 76 | 32 | 78.0 | 30 | 6 | US-10-546-303-483 | Sequence | 483, | App |
| 77 | 32 | 78.0 | 30 | 6 | US-10-546-303-484 | Sequence | 484, | App |
| 78 | 32 | 78.0 | 30 | 6 | US-10-546-303-485 | Sequence | 485, | App |
| 79 | 32 | 78.0 | 30 | 6 | US-10-546-303-486 | Sequence | 486, | App |
| 80 | 32 | 78.0 | 30 | 6 | US-10-546-303-487 | Sequence | 487, | App |
| 81 | 32 | 78.0 | 30 | 6 | US-10-546-303-495 | Sequence | 495, | App |
| 82 | 32 | 78.0 | 30 | 6 | US-10-546-303-496 | Sequence | 496, | App |
| 83 | 32 | 78.0 | 30 | 6 | US-10-546-303-497 | Sequence | 497, | App |
| 84 | 32 | 78.0 | 30 | 6 | US-10-546-303-498 | Sequence | 498, | App |
| 85 | 32 | 78.0 | 30 | 6 | US-10-546-303-499 | Sequence | 499, | App |
| 86 | 32 | 78.0 | 30 | 6 | US-10-546-303-500 | Sequence | 500, | App |
| 87 | 32 | 78.0 | 30 | 6 | US-10-546-303-501 | Sequence | 501, | App |
| 88 | 32 | 78.0 | 30 | 6 | US-10-546-303-502 | Sequence | 502, | App |
| 89 | 32 | 78.0 | 3.0 | 6 | US-10-546-303-521 | Sequence | 521, | App. |
| 90 | 32 | 78.0 | 30 | 6 | US-10-546-303-522 | Sequence | 522, | App |
| 91 | . 32 | 78.0 | 30 | 6 | US-10-546-303-523 | Sequence | | |
| 92 | 32 | 78.0 | 30 | 6 | US-10-546-303-524 | Sequence | 524, | App |
| 93 | 32 | 78.0 | 30 | 6 | US-10-546-303-525 | Sequence | | |
| 94 | . 32 | 78.0 | 30 | 6 | US-10-546-303-526 | Sequence | | |
| 95 | 32 | 78.0 | 30 | 6 | US-10-546-303-527 | Sequence | | |
| 96 | 32 · | 78.0 | 30 | 6. | US-10-546-303-528 | Sequence | | |
| 97 | 32 | 78.0 | 30 . | 6 | US-10-546-303-529 | Sequence | | |
| 98 | 32 | 78.0 | 30 | 6 | US-10-546-303-530 | Sequence | | |
| 99 | 32 | 78.0 | 30 | 6 | US-10-546-303-538 | Sequence | | |
| 100 | 32 | 78.0 | 30 | 6 | US-10-546-303-539 | Sequence | 539, | App |

ALIGNMENTS

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RESULT 1
US-11-055-093-235
; Sequence 235, Application US/11055093
; Publication No. US20060094652A1
; GENERAL INFORMATION:
  APPLICANT: LEVY, ODILE ESTHER
  APPLICANT: HANLEY, MICHAEL R.
  APPLICANT: JODKA, CAROLYN M.
  APPLICANT: LEWIS, DIANA Y.
  APPLICANT: SOARES, CHRISTOPHER J.
  APPLICANT: GHOSH, SOUMITRA S.
              D'SOUZA, LAWRENCE
  APPLICANT:
   APPLICANT:
              PARKES, DAVID
   APPLICANT: MACK, CHRISTINE M.
```

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TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
 FILE REFERENCE: 18528.740
; CURRENT APPLICATION NUMBER: US/11/055,093
; CURRENT FILING DATE: 2005-02-11
; PRIOR APPLICATION NUMBER: 60/543,407
; PRIOR FILING DATE: 2004-02-11
; NUMBER OF SEQ ID NOS: 288
  SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 235
   LENGTH: 29
   TYPE: PRT
   ORGANISM: Homo sapiens
US-11-055-093-235
 Query Match
                         80.5%; Score 33; DB 7; Length 29;
 Best Local Similarity 30.4%; Pred. No. 0.093;
         7; Conservative 0; Mismatches 16; Indels
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                                                                            0;
           1 HXXGXFTXDXXXXXXXXXXXII 23
            1 HAEGTFTSDVSSTLEGQAALEFI 23
RESULT 2
US-11-206-903-235
; Sequence 235, Application US/11206903
; Publication No. US20060293232A1
; GENERAL INFORMATION:
; APPLICANT: LEVY, ODILE ESTHER
 APPLICANT: HANLEY, MICHAEL R.
 APPLICANT: JODKA, CAROLYN M.
 APPLICANT: LEWIS, DIANA Y.
 APPLICANT: SOARES, CHRISTOPHER J.
 APPLICANT: GHOSH, SOUMITRA S.
APPLICANT: D'SOUZA, LAWRENCE
APPLICANT: PARKES, DAVID
 APPLICANT: MACK, CHRISTINE M.
; TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
 FILE REFERENCE: 0701-CIP2-0
 CURRENT APPLICATION NUMBER: US/11/206,903
 CURRENT FILING DATE: 2005-08-17
 PRIOR APPLICATION NUMBER: 11/201,664
 PRIOR FILING DATE: 2005-08-11
  PRIOR APPLICATION NUMBER: 11/055,093
  PRIOR FILING DATE: 2005-02-11
  PRIOR APPLICATION NUMBER: 60/543,407
  PRIOR FILING DATE: 2004-02-11
; NUMBER OF SEQ ID NOS: 399
  SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 235
   LENGTH: 29
   TYPE: PRT
   ORGANISM: Homo sapiens
US-11-206-903-235
                         80.5%; Score 33; DB 7; Length 29;
 Query Match.
 Best Local Similarity 30.4%; Pred. No. 0.093;
           7; Conservative
                               0; Mismatches 16; Indels 0; Gaps
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Qу
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1 HAEGTFTSDVSSTLEGQAALEFI 23

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RESULT 3
US-10-559-595-221
; Sequence 221, Application US/10559595
; Publication No. US20060172001A1
; GENERAL INFORMATION:
; APPLICANT: Ong, John
; APPLICANT: Stetsko, Gregg
  APPLICANT: Jennings, Robert
  TITLE OF INVENTION: Novel Methods and Compositions for Enhanced Transmucosal Delive
  TITLE OF INVENTION: of Peptides and Proteins
  FILE REFERENCE: 0501-UTL-0
  CURRENT APPLICATION NUMBER: US/10/559,595
  CURRENT FILING DATE: 2005-11-30
  PRIOR APPLICATION NUMBER: US 60/474,233
; PRIOR FILING DATE: 2003-05-30
; PRIOR APPLICATION NUMBER: PCT/ US2004/017456
  PRIOR FILING DATE: 2004-05-28
; NUMBER OF SEO ID NOS: 292
  SOFTWARE: PatentIn version 3.3
; SEQ ID NO 221
   LENGTH: 30
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Synthetic construct
   FEATURE:
   NAME/KEY: MOD RES
   LOCATION: (16)..(16)
US-10-559-595-221
  Query Match
                         80.5%; Score 33; DB 6; Length 30;
  Best Local Similarity 30.4%; Pred. No. 0.096;
            7; Conservative
                               0; Mismatches 16; Indels 0; Gaps
           1 HXXGXFTXDXXXXXXXXXXXXI 23
Qу
            1 HAEGTFTSDVSSYLEAQAAKEFI 23
RESULT 4
US-10-559-595-214
; Sequence 214, Application US/10559595
; Publication No. US20060172001A1
; GENERAL INFORMATION:
  APPLICANT: Ong, John
; APPLICANT: Stetsko, Gregg
; APPLICANT: Jennings, Robert
  TITLE OF INVENTION: Novel Methods and Compositions for Enhanced Transmucosal Delive
  TITLE OF INVENTION: of Peptides and Proteins
  FILE REFERENCE: 0501-UTL-0
  CURRENT APPLICATION NUMBER: US/10/559,595
 CURRENT FILING DATE: 2005-11-30
  PRIOR APPLICATION NUMBER: US 60/474,233
  PRIOR FILING DATE: 2003-05-30
  PRIOR APPLICATION NUMBER: PCT/ US2004/017456
  PRIOR FILING DATE: 2004-05-28
  NUMBER OF SEQ ID NOS: 292
  SOFTWARE: PatentIn version 3.3
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; SEQ ID NO 214
   LENGTH: 31
   TYPE: PRT
   ORGANISM: Artificial Sequence
   OTHER INFORMATION: Synthetic construct
   FEATURE:
   NAME/KEY: MOD RES
   LOCATION: (16)..(16)
US-10-559-595-214
                         80.5%; Score 33; DB 6; Length 31;
 Query Match
 Best Local Similarity 30.4%; Pred. No. 0.099;
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 Matches 7; Conservative
                             0; Mismatches 16; Indels
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             1 HAEGTFTSDVSSYLEAQAAKEFI 23
RESULT 5
US-11-055-093-176
; Sequence 176, Application US/11055093
; Publication No. US20060094652A1
; GENERAL INFORMATION:
; APPLICANT: LEVY, ODILE ESTHER
; APPLICANT: HANLEY, MICHAEL R.
; APPLICANT: JODKA, CAROLYN M.
; APPLICANT: LEWIS, DIANA Y.
; APPLICANT: SOARES, CHRISTOPHER J.
; APPLICANT: GHOSH, SOUMITRA S.
; APPLICANT: D'SOUZA, LAWRENCE
  APPLICANT: PARKES, DAVID
  APPLICANT: MACK, CHRISTINE M.
  TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
; FILE REFERENCE: 18528.740
; CURRENT APPLICATION NUMBER: US/11/055,093
; CURRENT FILING DATE: 2005-02-11
; PRIOR APPLICATION NUMBER: 60/543,407
; PRIOR FILING DATE: 2004-02-11
; NUMBER OF SEQ ID NOS: 288
  SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 176
   LENGTH: 31
   TYPE: PRT
   ORGANISM: Homo sapiens
US-11-055-093-176
 Query Match
                         80.5%; Score 33; DB 7; Length 31;
 Best Local Similarity 30.4%; Pred. No. 0.099;
 Matches 7; Conservative · 0; Mismatches 16; Indels
                                                               0; Gaps
                                                                           0;
           1 HXXGXFTXDXXXXXXXXXXXII 23
             1 1 1 1 1
           1 HATGTFTSDVSSYLEGQAALEFI 23
RESULT 6
US-11-055-093-177
; Sequence 177, Application US/11055093
; Publication No. US20060094652A1
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```
; GENERAL INFORMATION:
; APPLICANT: LEVY, ODILE ESTHER
 APPLICANT: HANLEY, MICHAEL R. APPLICANT: JODKA, CAROLYN M.
 APPLICANT: LEWIS, DIANA Y.
 APPLICANT: SOARES, CHRISTOPHER J.
 APPLICANT: GHOSH, SOUMITRA S.
  APPLICANT: D'SOUZA, LAWRENCE
  APPLICANT: PARKES, DAVID
  APPLICANT: MACK, CHRISTINE M.
  TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
  FILE REFERENCE: 18528.740
  CURRENT APPLICATION NUMBER: US/11/055,093
  CURRENT FILING DATE: 2005-02-11
  PRIOR APPLICATION NUMBER: 60/543,407
  PRIOR FILING DATE: 2004-02-11
  NUMBER OF SEQ ID NOS: 288
 SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 177
  LENGTH: 31
   TYPE: PRT
   ORGANISM: Homo sapiens
   FEATURE:
   NAME/KEY: MOD RES
   LOCATION: (3)
  OTHER INFORMATION: D-Thr
US-11-055-093-177
                         80.5%; Score 33; DB 7; Length 31;
 Query Match
 Best Local Similarity 30.4%; Pred. No. 0.099;
 Matches 7; Conservative 0; Mismatches 16; Indels
                                                                0; Gaps
           1 HXXGXFTXDXXXXXXXXXXXXI 23
Qу
                        1 1
             1 HATGTFTSDVSSYLEGQAALEFI 23
RESULT 7
US-11-055-093-204
; Sequence 204, Application US/11055093
; Publication No. US20060094652A1
; GENERAL INFORMATION:
; APPLICANT: LEVY, ODILE ESTHER
  APPLICANT: HANLEY, MICHAEL R.
; APPLICANT: JODKA, CAROLYN M.
; APPLICANT: LEWIS, DIANA Y.
; APPLICANT: SOARES, CHRISTOPHER J.
; APPLICANT: GHOSH, SOUMITRA S.
; APPLICANT: D'SOUZA, LAWRENCE
; APPLICANT: PARKES, DAVID
; APPLICANT: MACK, CHRISTINE M.
  TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
  FILE REFERENCE: 18528.740
  CURRENT APPLICATION NUMBER: US/11/055,093
  CURRENT FILING DATE: 2005-02-11
  PRIOR APPLICATION NUMBER: 60/543,407
  PRIOR FILING DATE: 2004-02-11
; NUMBER OF SEQ ID NOS: 288
; SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 204
   LENGTH: 31
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TYPE: PRT
   ORGANISM: Homo sapiens
US-11-055-093-204
 Query Match
                          80.5%; Score 33; DB 7; Length 31;
 Best Local Similarity 30.4%; Pred. No. 0.099;
            7; Conservative
                               0; Mismatches 16; Indels
                                                                 0; Gaps
           1 HXXGXFTXDXXXXXXXXXXXXI 23
            1 HAEGTFTSDVSSTLEGQAALEFI 23
RESULT 8
US-11-206-903-176
; Sequence 176, Application US/11206903
; Publication No. US20060293232A1
; GENERAL INFORMATION:
 APPLICANT: LEVY, ODILE ESTHER
  APPLICANT: HANLEY, MICHAEL R.
  APPLICANT: JODKA, CAROLYN M.
APPLICANT: LEWIS, DIANA Y.
APPLICANT: SOARES, CHRISTOPHER J.
  APPLICANT: GHOSH, SOUMITRA S.
  APPLICANT: D'SOUZA, LAWRENCE
; APPLICANT: PARKES, DAVID
; APPLICANT: MACK, CHRISTINE M.
  TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
  FILE REFERENCE: 0701-CIP2-0
  CURRENT APPLICATION NUMBER: US/11/206,903
  CURRENT FILING DATE: 2005-08-17
  PRIOR APPLICATION NUMBER: 11/201,664
  PRIOR FILING DATE: 2005-08-11
  PRIOR APPLICATION NUMBER: 11/055,093
  PRIOR FILING DATE: 2005-02-11
  PRIOR APPLICATION NUMBER: 60/543,407
  PRIOR FILING DATE: 2004-02-11
; NUMBER OF SEQ ID NOS: 399
  SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 176
   LENGTH: 31
   TYPE: PRT
   ORGANISM: Homo sapiens
US-11-206-903-176
 Query Match
                          80.5%; Score 33; DB 7; Length 31;
 Best Local Similarity
                          30.4%; Pred. No. 0.099;
                                 0; Mismatches 16; Indels
          7; Conservative
Qу
           1 HXXGXFTXDXXXXXXXXXXXXI 23
             1 HATGTFTSDVSSYLEGQAALEFI 23
RESULT 9
US-11-206-903-177
; Sequence 177, Application US/11206903
; Publication No. US20060293232A1
; GENERAL INFORMATION:
; APPLICANT: LEVY, ODILE ESTHER
; APPLICANT: HANLEY, MICHAEL R.
```

```
APPLICANT: JODKA, CAROLYN M.
; APPLICANT: LEWIS, DIANA Y.
; APPLICANT: SOARES, CHRISTOPHER J.
; APPLICANT: GHOSH, SOUMITRA S.
; APPLICANT: D'SOUZA, LAWRENCE
; APPLICANT: PARKES, DAVID
; APPLICANT: MACK, CHRISTINE M.
  TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
; FILE REFERENCE: 0701-CIP2-0
  CURRENT APPLICATION NUMBER: US/11/206,903
  CURRENT FILING DATE: 2005-08-17
  PRIOR APPLICATION NUMBER: 11/201,664
  PRIOR FILING DATE: 2005-08-11
  PRIOR APPLICATION NUMBER: 11/055,093
; PRIOR FILING DATE: 2005-02-11
; PRIOR APPLICATION NUMBER: 60/543,407
; PRIOR FILING DATE: 2004-02-11
; NUMBER OF SEQ ID NOS: 399
 SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 177
   LENGTH: 31
   TYPE: PRT
;
   ORGANISM: Homo sapiens
   FEATURE:
   NAME/KEY: MOD RES
   LOCATION: (3)
   OTHER INFORMATION: D-Thr
US-11-206-903-177
  Query Match
                          80.5%; Score 33; DB 7; Length 31;
  Best Local Similarity 30.4%; Pred. No. 0.099;
  Matches 7; Conservative
                               0; Mismatches 16; Indels
                                                                  0; Gaps
                                                                               0:
Qу
            1 HXXGXFTXDXXXXXXXXXXXXI 23
             1 HATGTFTSDVSSYLEGQAALEFI 23
RESULT 10
US-11-206-903-204
; Sequence 204, Application US/11206903
; Publication No. US20060293232A1
; GENERAL INFORMATION:
 APPLICANT: LEVY, ODILE ESTHER
; APPLICANT: HANLEY, MICHAEL R.
; APPLICANT: JODKA, CAROLYN M.
; APPLICANT: LEWIS, DIANA Y.
; APPLICANT: SOARES, CHRISTOPHER J.
; APPLICANT: GHOSH, SOUMITRA S.
; APPLICANT: D'SOUZA, LAWRENCE
  APPLICANT: PARKES, DAVID
  APPLICANT: MACK, CHRISTINE M.
  TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
  FILE REFERENCE: 0701-CIP2-0
; CURRENT APPLICATION NUMBER: US/11/206,903
  CURRENT FILING DATE: 2005-08-17
   PRIOR APPLICATION NUMBER: 11/201,664
  PRIOR FILING DATE: 2005-08-11
  PRIOR APPLICATION NUMBER: 11/055,093
 PRIOR FILING DATE: 2005-02-11
; PRIOR APPLICATION NUMBER: 60/543,407
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PRIOR FILING DATE: 2004-02-11
 NUMBER OF SEQ ID NOS: 399
  SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 204
   LENGTH: 31
    TYPE: PRT
   ORGANISM: Homo sapiens
US-11-206-903-204
  Query Match
                          80.5%; Score 33; DB 7; Length 31;
  Best Local Similarity 30.4%; Pred. No. 0.099;
  Matches 7; Conservative 0; Mismatches 16; Indels
                                                                 0; Gaps
           1 HXXGXFTXDXXXXXXXXXXXXI 23
            1 HAEGTFTSDVSSTLEGQAALEFI 23
RESULT 11
US-11-055-093-59
; Sequence 59, Application US/11055093
; Publication No. US20060094652A1
; GENERAL INFORMATION:
; APPLICANT: LEVY, ODILE ESTHER
 APPLICANT: HANLEY, MICHAEL R.
 APPLICANT: JODKA, CAROLYN M.

APPLICANT: LEWIS, DIANA Y.

APPLICANT: SOARES, CHRISTOPHER J.

APPLICANT: GHOSH, SOUMITRA S.
  APPLICANT: D'SOUZA, LAWRENCE
; APPLICANT: PARKES, DAVID
; APPLICANT: MACK, CHRISTINE M.
  TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
  FILE REFERENCE: 18528.740
  CURRENT APPLICATION NUMBER: US/11/055,093
  CURRENT FILING DATE: 2005-02-11
  PRIOR APPLICATION NUMBER: 60/543,407
  PRIOR FILING DATE: 2004-02-11
  NUMBER OF SEQ ID NOS: 288
 SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 59
  LENGTH: 37
   TYPE: PRT
   ORGANISM: Homo sapiens
US-11-055-093-59
  Query Match
                          80.5%; Score 33; DB 7; Length 37;
 Best Local Similarity
                          30.4%; Pred. No. 0.12;
 Matches 7; Conservative
                              0; Mismatches 16; Indels 0; Gaps
           1 HXXGXFTXDXXXXXXXXXXXXI 23
Qу
            7 HAEGTFTSDVSSTLEGQAALEFI 29
RESULT 12
US-11-206-903-59
; Sequence 59, Application US/11206903
; Publication No. US20060293232A1
; GENERAL INFORMATION:
; APPLICANT: LEVY, ODILE ESTHER
```

```
APPLICANT: HANLEY, MICHAEL R.
; APPLICANT: JODKA, CAROLYN M.
; APPLICANT: LEWIS, DIANA Y.
; APPLICANT: SOARES, CHRISTOPHER J.
; APPLICANT: GHOSH, SOUMITRA S.
; APPLICANT: D'SOUZA, LAWRENCE
; APPLICANT: PARKES, DAVID
; APPLICANT: MACK, CHRISTINE M.
; TITLE OF INVENTION: HYBRID POLYPEPTIDES WITH SELECTABLE PROPERTIES
; FILE REFERENCE: 0701-CIP2-0
 CURRENT APPLICATION NUMBER: US/11/206,903
  CURRENT FILING DATE: 2005-08-17
  PRIOR APPLICATION NUMBER: 11/201,664
  PRIOR FILING DATE: 2005-08-11
 PRIOR APPLICATION NUMBER: 11/055,093
; PRIOR FILING DATE: 2005-02-11
; PRIOR APPLICATION NUMBER: 60/543,407
; PRIOR FILING DATE: 2004-02-11
; NUMBER OF SEQ ID NOS: 399.
; SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 59
   LENGTH: 37
   TYPE: PRT
   ORGANISM: Homo sapiens
US-11-206-903-59
 Query Match
                         80.5%; Score 33; DB 7; Length 37;
 Best Local Similarity 30.4%; Pred. No. 0.12;
 Matches 7; Conservative 0; Mismatches 16; Indels
           1 HXXGXFTXDXXXXXXXXXXXXI 23
            7 HAEGTFTSDVSSTLEGQAALEFI 29
RESULT 13
US-11-367-692-7
; Sequence 7, Application US/11367692
; Publication No. US20060205037A1
; GENERAL INFORMATION:
; APPLICANT: Sadeghi, Homayoun
; APPLICANT: Turner, Andrew J.
; APPLICANT: Prior, Christopher P.
; APPLICANT: Ballance, David J.
; TITLE OF INVENTION: Modified Transferrin Fusion Protein
; FILE REFERENCE: BIOR-013/02US
; CURRENT APPLICATION NUMBER: US/11/367,692
; CURRENT FILING DATE: 2006-03-06
 PRIOR APPLICATION NUMBER: US 60/658,140
 PRIOR FILING DATE: 2005-03-04
  PRIOR APPLICATION NUMBER: US 60/663,757
  PRIOR FILING DATE: 2005-03-22
  NUMBER OF SEQ ID NOS: 129
  SOFTWARE: PatentIn version 3.3
; SEQ ID NO 7
   LENGTH: 28
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US-11-367-692-7
                  78.0%; Score 32; DB 7; Length 28;
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US-10-530-125-1
; Sequence 1, Application US/10530125
; Publication No. US20060194720A1
; GENERAL INFORMATION:
; APPLICANT: SANWA KAGAKU KENKYUSHO CO., LTD.
 TITLE OF INVENTION: GLP-1 derivatives and the use
; FILE REFERENCE: JP0304SKK
; CURRENT APPLICATION NUMBER: US/10/530,125
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: JP 2002-299283
; PRIOR FILING DATE: 2002-10-11
; NUMBER OF SEQ ID NOS: 25
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
   LENGTH: 29
   TYPE: PRT
   ORGANISM: Artificial
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   OTHER INFORMATION: GLP1(7-35)
US-10-530-125-1
 Query Match
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RESULT 15
US-11-367-692-8
; Sequence 8, Application US/11367692
; Publication No. US20060205037A1
; GENERAL INFORMATION:
; APPLICANT: Sadeghi, Homayoun
; APPLICANT: Turner, Andrew J.
; APPLICANT: Prior, Christopher P.
; APPLICANT: Ballance, David J.
  TITLE OF INVENTION: Modified Transferrin Fusion Protein
; FILE REFERENCE: BIOR-013/02US
  CURRENT APPLICATION NUMBER: US/11/367,692
; CURRENT FILING DATE: 2006-03-06
; PRIOR APPLICATION NUMBER: US 60/658,140
; PRIOR FILING DATE: 2005-03-04
; PRIOR APPLICATION NUMBER: US 60/663,757
; PRIOR FILING DATE: 2005-03-22
  NUMBER OF SEQ ID NOS: 129
  SOFTWARE: PatentIn version 3.3
; SEQ ID NO 8
  LENGTH: 29
   TYPE: PRT
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ORGANISM: Homo sapiens
US-11-367-692-8
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Qу
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           1 HAEGTFTSDVSSYLEGQAAKEFI 23
RESULT 16
US-10-559-595-217
; Sequence 217, Application US/10559595
; Publication No. US20060172001A1
; GENERAL INFORMATION:
; APPLICANT: Ong, John
; APPLICANT: Stetsko, Gregg
; APPLICANT: Jennings, Robert
  TITLE OF INVENTION: Novel Methods and Compositions for Enhanced Transmucosal Delive
  TITLE OF INVENTION: of Peptides and Proteins
  FILE REFERENCE: 0501-UTL-0
  CURRENT APPLICATION NUMBER: US/10/559,595
  CURRENT FILING DATE: 2005-11-30
  PRIOR APPLICATION NUMBER: US 60/474,233
  PRIOR FILING DATE: 2003-05-30
  PRIOR APPLICATION NUMBER: PCT/ US2004/017456
  PRIOR FILING DATE: 2004-05-28
; NUMBER OF SEQ ID NOS: 292
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 217
   LENGTH: 30
   TYPE: PRT
   ORGANISM: Artificial Sequence
   OTHER INFORMATION: Synthetic construct
US-10-559-595-217
 Query Match
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                               0; Mismatches 16; Indels
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            1 HAEGTFTSDVSSYLEEQAAKEFI 23
RESULT 17
US-10-559-595-218
; Sequence 218, Application US/10559595
; Publication No. US20060172001A1
; GENERAL INFORMATION:
; APPLICANT: Ong, John
; APPLICANT: Stetsko, Gregg
; APPLICANT: Jennings, Robert
 TITLE OF INVENTION: Novel Methods and Compositions for Enhanced Transmucosal Delive
; TITLE OF INVENTION: of Peptides and Proteins
; FILE REFERENCE: 0501-UTL-0
; CURRENT APPLICATION NUMBER: US/10/559,595
; CURRENT FILING DATE: 2005-11-30
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PRIOR APPLICATION NUMBER: US 60/474,233
  PRIOR FILING DATE: 2003-05-30
  PRIOR APPLICATION NUMBER: PCT/ US2004/017456
  PRIOR FILING DATE: 2004-05-28
; NUMBER OF SEQ ID NOS: 292
  SOFTWARE: PatentIn version 3.3
; SEQ ID NO 218
   LENGTH: 30
  TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Synthetic construct
US-10-559-595-218
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            7; Conservative
                               0; Mismatches 16; Indels 0; Gaps
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Qу
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RESULT 18
US-10-559-595-219
; Sequence 219, Application US/10559595
; Publication No. US20060172001A1
; GENERAL INFORMATION:
 APPLICANT: Ong, John
  APPLICANT: Stetsko, Gregg
  APPLICANT: Jennings, Robert
 TITLE OF INVENTION: Novel Methods and Compositions for Enhanced Transmucosal Delive
  TITLE OF INVENTION: of Peptides and Proteins
  FILE REFERENCE: 0501-UTL-0
  CURRENT APPLICATION NUMBER: US/10/559,595
  CURRENT FILING DATE: 2005-11-30
  PRIOR APPLICATION NUMBER: US 60/474,233
  PRIOR FILING DATE: 2003-05-30
  PRIOR APPLICATION NUMBER: PCT/ US2004/017456
  PRIOR FILING DATE: 2004-05-28
  NUMBER OF SEQ ID NOS: 292
  SOFTWARE: PatentIn version 3.3
; SEQ ID NO 219
   LENGTH: 30
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Synthetic construct
US-10-559-595-219
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RESULT 19
US-10-559-595-220
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; Sequence 220, Application US/10559595
; Publication No. US20060172001A1
; GENERAL INFORMATION:
 APPLICANT: Ong, John
  APPLICANT: Stetsko, Gregg
  APPLICANT: Jennings, Robert
  TITLE OF INVENTION: Novel Methods and Compositions for Enhanced Transmucosal Delive
  TITLE OF INVENTION: of Peptides and Proteins
  FILE REFERENCE: 0501-UTL-0
  CURRENT APPLICATION NUMBER: US/10/559,595
  CURRENT FILING DATE: 2005-11-30
  PRIOR APPLICATION NUMBER: US 60/474,233
  PRIOR FILING DATE: 2003-05-30
  PRIOR APPLICATION NUMBER: PCT/ US2004/017456
  PRIOR FILING DATE: 2004-05-28
  NUMBER OF SEQ ID NOS: 292
  SOFTWARE: PatentIn version 3.3
; SEQ ID NO 220
   LENGTH: 30
   TYPE: PRT.
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Synthetic construct
US-10-559-595-220
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 Matches 7; Conservative
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                                0; Mismatches 16; Indels
Qу
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             1 1 11 1
           1 HAEGTFTSDVSSYLEKQAAKEFI 23
RESULT 20
US-10-559-595-226
; Sequence 226, Application US/10559595
; Publication No. US20060172001A1
; GENERAL INFORMATION:
 APPLICANT: Ong, John
              Stetsko, Gregg
  APPLICANT:
              Jennings, Robert
  APPLICANT:
  TITLE OF INVENTION: Novel Methods and Compositions for Enhanced Transmucosal Delive
  TITLE OF INVENTION: of Peptides and Proteins
  FILE REFERENCE: 0501-UTL-0
  CURRENT APPLICATION NUMBER: US/10/559,595
  CURRENT FILING DATE: 2005-11-30
  PRIOR APPLICATION NUMBER: US 60/474,233
  PRIOR FILING DATE: 2003-05-30
  PRIOR APPLICATION NUMBER: PCT/ US2004/017456
  PRIOR FILING DATE: 2004-05-28
  NUMBER OF SEQ ID NOS: 292
  SOFTWARE: PatentIn version 3.3
  SEQ ID NO 226
   LENGTH: 30
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Synthetic construct
   FEATURE:
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RESULT 21
US-10-559-595-231
; Sequence 231, Application US/10559595
; Publication No. US20060172001A1
; GENERAL INFORMATION:
; APPLICANT: Ong, John
; APPLICANT: Stetsko, Gregg
; APPLICANT: Jennings, Robert
  TITLE OF INVENTION: Novel Methods and Compositions for Enhanced Transmucosal Delive
  TITLE OF INVENTION: of Peptides and Proteins
 FILE REFERENCE: 0501-UTL-0
  CURRENT APPLICATION NUMBER: US/10/559,595
  CURRENT FILING DATE: .2005-11-30
  PRIOR APPLICATION NUMBER: US 60/474,233
; PRIOR FILING DATE: 2003-05-30
; PRIOR APPLICATION NUMBER: PCT/ US2004/017456
; PRIOR FILING DATE: 2004-05-28
; NUMBER OF SEQ ID NOS: 292
  SOFTWARE: PatentIn version 3.3
; SEQ ID NO 231
   LENGTH: 30
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Synthetic construct
   FEATURE:
   NAME/KEY: MOD RES
   LOCATION: (16)..(16)
US-10-559-595-231
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RESULT 22
US-10-541-526-7
; Sequence 7, Application US/10541526
; Publication No. US20060189522A1
; GENERAL INFORMATION:
; APPLICANT: Bloom, Stephen R.
; APPLICANT: Ghatei, Mohammad A.
; APPLICANT: Small, Caroline J.
; APPLICANT: Dakin, Catherine L.
; TITLE OF INVENTION: MODIFICATION OF FEEDING BEHAVIOUR
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FILE REFERENCE: AI 9250 US
  CURRENT APPLICATION NUMBER: US/10/541,526
  CURRENT FILING DATE: 2005-07-07
  PRIOR APPLICATION NUMBER: PCT/GB2004/000017
  PRIOR FILING DATE: 2004-01-12
  PRIOR APPLICATION NUMBER: GB 0300571.7
  PRIOR FILING DATE: 2003-01-10
  NUMBER OF SEQ ID NOS: 9
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
   LENGTH: 30
   TYPE: PRT
   ORGANISM: Homo sapiens
US-10-541-526-7
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RESULT 23
US-10-530-125-2
; Sequence 2, Application US/10530125
; Publication No. US20060194720A1
; GENERAL INFORMATION:
  APPLICANT: SANWA KAGAKU KENKYUSHO CO., LTD.
  TITLE OF INVENTION: GLP-1 derivatives and the use
  FILE REFERENCE: JP0304SKK
  CURRENT APPLICATION NUMBER: US/10/530,125
  CURRENT FILING DATE: 2005-04-04
  PRIOR APPLICATION NUMBER: JP 2002-299283
  PRIOR FILING DATE: 2002-10-11
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
   LENGTH: 30
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